

EDGE

THE FUTURE OF INTERACTIVE ENTERTAINMENT

EDGE-ONLINE.COM

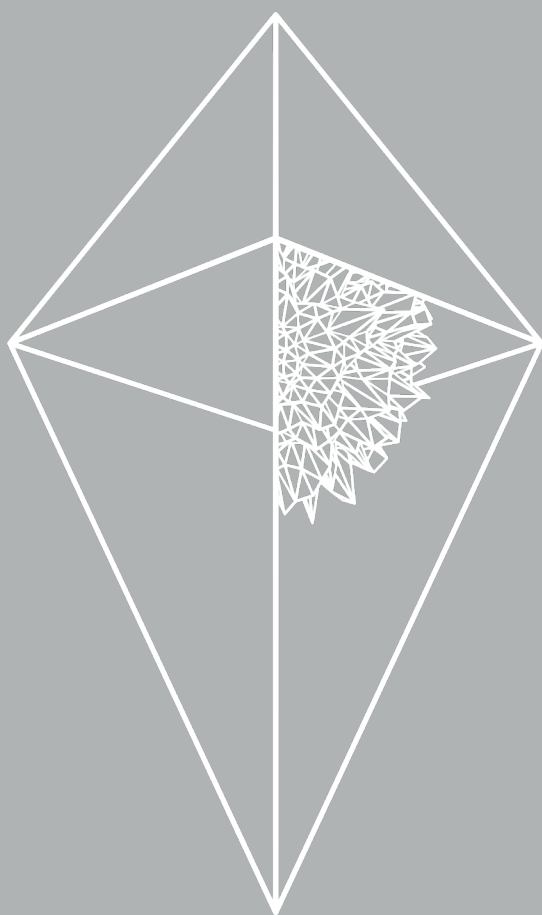
NO MAN'S SKY

INFINITE. EPIC. INDIE. THE INSIDE STORY



#270

SEPTEMBER 2014



Is it really time to put the 'i' word on the banned list?

If you've been following conversations on gaming's fringes lately, you may have noticed calls for the abolition of the word 'indie'. It's a label that has been slyly co-opted by marketing departments, the arguments go, its value as a meaningful adjective eroded to the point that we need to find a replacement. A key issue seems to be the difficulty involved in defining what 'indie' means in 2014. Is it something to do with the size of the team? The team's artistic approach? The way the team distributes its work? No, no and no. Perspectives like these are too narrow to be of any practical use. But how about this? Being indie means not having to answer to anyone but yourself. Finding a 100-per-cent bulletproof definition is impossible, but whether you're a 300-person operation like Valve or a one-man band like Terry Cavanagh, whether you're making a balls-out FPS or a meditative puzzler, whether you're chancing your arm via Steam or giving away games for free, this one feels sturdier than most.

The reality is that sometimes we need shorthand like 'indie' for things like magazine covers, when we're trying to emphasise, within a limited amount of space, a central aspect of a game like *No Man's Sky*. And let's be really clear, that's all this is: shorthand. We're not attempting to force something into a box that may not be the right shape or size.

The work of indie creators is a recurrent theme in this issue. In Hype, we visit The Chinese Room to take our first steps into the mysterious world of *Everybody's Gone To The Rapture*, and in our features section we talk to the studio's fellow pioneers in this new genre. Elsewhere, we spend some hands-on time with cover game *No Man's Sky*, and also catch up with Martin Kenwright, the ex-Evolution Studios man who cut loose from Sony five years ago and is now making a comeback on his own terms. Then there is our look into the world of console ROM hackers, a group that couldn't be operating any farther outside of the establishment's walls.

OK, that's 'indie' sorted, then. Now, about 'triple-A'...



games

Hype



38 **Everybody's Gone To The Rapture**
PS4

44 **Forza Horizon 2**
Xbox One

48 **Ori And The Blind Forest**
PC, Xbox One

54 **Titan Souls**
PC, PS4, Vita

56 **Mario Maker**
Wii U

58 **Hype Roundup**

Play

104 **Valiant Hearts: The Great War**
360, PC, PS3, PS4, Xbox One

108 **Divinity: Original Sin**
PC

112 **Shovel Knight**
3DS, PC, Wii U

114 **Pullblox World**
Wii U

115 **Road Not Taken**
PC, PS4

116 **Supernauts**
iOS

117 **1001 Spikes**
360, 3DS, PC, PS4, Vita, Wii U, Xbox One



Explore the iPad edition of Edge for additional content



Follow these links throughout the magazine for more content online



82

#270

sections

SEPTEMBER 2014



98

Knowledge

8 Disconnected

Why Microsoft's bid to put Kinect in every home ended in failure

12 Brave new world

Friend & Foe is proving that there is life after *The Last Guardian*

14 Never tired

How Russian off-roader *Spintires* conquered the Steam charts

16 GIG Challenge 2014

Our industry panel crowns the winners of this year's contest

18 Fine young coders

How the Finnish education system is adding coding to the curriculum

20 Screen shock

Elite: Dangerous is charting new space for in-game screen grabs

22 Soundbytes

Miyamoto slams E3, Bartle blasts F2P, and Pitchford talks gibberish

24 My Favourite Game

Former Megadeth guitarist Marty Friedman looks back at Q*bert

26 This Month On Edge

The things that caught our eye during the production of E270

Dispatches

28 Dialogue

Edge readers share their opinions; one wins a Turtle Beach headset

30 Trigger Happy

Steven Poole considers speedruns as an expression of admiration

32 Difficulty Switch

Ian Bogost on why so-called 'simulators' so often reject reality

34 Big Picture Mode

Nathan Brown ponders what's really going on at Valve HQ

129 Postcards From The Clipping Plane

James Leach on the blind spots that hamper game development

74 Game Changers

Meet the hackers tweaking ROM files to breathe new life into console games of yore

82 An Audience With...

DID and Evolution Studios founder Martin Kenwright maps out his return to the game industry

86 New Horizons

Inside the new wave of actionless adventure games that prefer discovery to destruction

94 The Making Of...

Toshihiro Nagoshi reflects on the creation of beloved open-world PlayStation 2 brawler *Yakuza*

98 Studio Profile

How Finnish studio Redlynx has retained its playful spirit since its acquisition by Ubisoft

118 Time Extend

We call for a rewind of Inis's Japan-only DS music game *Osu! Tatakae! Ouendan*

Features

62 Maths Effect

Exploring the procedural frontier in Hello Games' audacious PS4 and PC project, *No Man's Sky*



62



86



EDGE

5

EDGE

EDITORIAL

Tony Mott editor in chief **Mark Wynne** senior art editor
Nathan Brown games editor **Matthew Clapham** production editor
Michael Gapper news/features editor **Ben Maxwell** writer
Andrew Hind art editor

CONTRIBUTORS

Anthony Agnello, Ian Bogost, Mitch Bowman, Rose Brandle, Martin Davies, James Leach, Richard Moss, Steven Poole, Daniel Robson, Chris Schilling, Chris Thursten, Alvin Weetman

BUSINESS

Steve Turner account manager **Jas Rai** advertising sales manager **Charlie Said** sales director
Adam Jones senior product manager **Sam Wight** group marketing manager **Tilly Michell** marketing executive
Declan Gough head of creative and design **Clair Porteous** deputy MD, film and games
Nial Ferguson managing director, technology, film and games

CONTACT US

Editorial +44 (0)1225 442244 edge@futurenet.com
Advertising +44 (0)20 7042 4219 jas.ra@futurenet.com
UK print subscriptions 0844 848 2852
International print subscriptions +44 (0)1604 250145
Subscribe online at www.myfavouriteitemagazines.com

FUTURE GAMES UK

Daniel Dawkins group senior editor **Graham Dalzell** group art director

FUTURE UK

Robin Abbott creative director **Jim Douglas** editorial director

CIRCULATION

Matt Cooper trade marketing executive **Rachael Cock** trade marketing director
John Lawton international account manager

PRINT & PRODUCTION

Mark Constance production manager **Frances Twentyman** production controller
Nathan Drewett ad production co-ordinator

LICENSING

Regina Erak senior licensing and syndication manager

If you would like to purchase the images featured in this publication, please visit www.futuremediastore.com or email mediastore@futurenet.com

Printed in the UK by William Gibbons. Covers printed by Philtone Litho Limited. Distributed in the UK by Seymour Distribution Ltd, 2 East Poultry Avenue, London, EC1A 9PT (+44 (0)20 7429 4000)

All submissions to **Edge** are made on the basis of a licence to publish the submission in **Edge** magazine and its licensed editions worldwide. Any material submitted is sent at the owner's risk and, although every care is taken, neither Future Publishing Limited nor its agents shall be liable for loss or damage. All contents © Future Publishing Ltd 2014. While we make every effort possible to ensure that everything we print is factually correct, we cannot be held responsible if factual errors occur. Please check any quoted prices and specs with your supplier before purchase. Developers! Send your revenue-share proposals to the usual address. Let's make some money here.

© Future Publishing Limited 2014. All rights reserved.

No part of this magazine may be used or reproduced without the written permission of the publisher.
Edge is the registered trademark of Future Publishing Limited. All rights reserved.

Future Publishing Limited (company number 2008885) is registered in England and Wales. The registered office of Future Publishing Limited is at Beauford Court, 30 Monmouth Street, Bath BA1 2BW. All information contained in this magazine is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any responsibility for errors or inaccuracies in such information. Readers are advised to contact manufacturers and retailers directly with regard to the price of products/services referred to in this magazine. If you submit unsolicited material to us, you automatically grant Future a licence to publish your submission in whole or in part in all editions of the magazine, including licensed editions worldwide and in any physical or digital format throughout the world. Any material you submit is sent at your risk and, although every care is taken, neither Future nor its employees, agents or subcontractors shall be liable for loss or damage.

Want to work for Future? Visit www.futurenet.com/jobs

Future Publishing, 30 Monmouth Street, Bath, BA1 2BW
Telephone: +44 (0)1225 442244
Fax: +44 (0)1225 732275



We are committed to only using magazine paper which is derived from well managed, certified forestry and chlorine-free manufacture. Future Publishing and its paper suppliers have been independently certified in accordance with the rules of the FSC (Forest Stewardship Council).



Future produces high-quality multimedia products which reach our audiences online, on mobile and in print. Future attracts over 50 million consumers to its brands every month across five core sectors: Technology, Entertainment, Music, Creative and Sports & Auto. We export and license our publications.

Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR).
www.futureplc.com

Chief executive Zillah Byng-Maddick
Non-executive chairman Peter Allen
Tel +44 (0)207 042 4000 (London)
Tel +44 (0)1225 442 244 (Bath)



Print 14,351
Digital 6,134

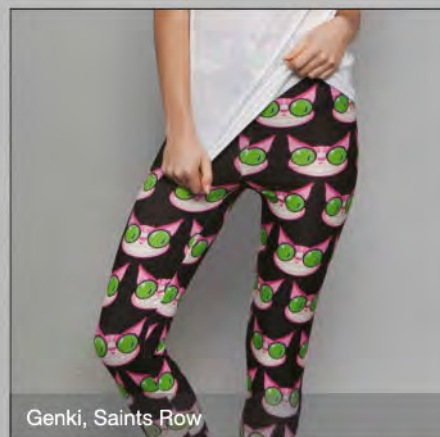
The ABC combined print, digital and digital publication circulation for Jan-Dec 2013 is
20,485
A member of the Audited Bureau of Circulations



Specialist Magazine
Of The Year



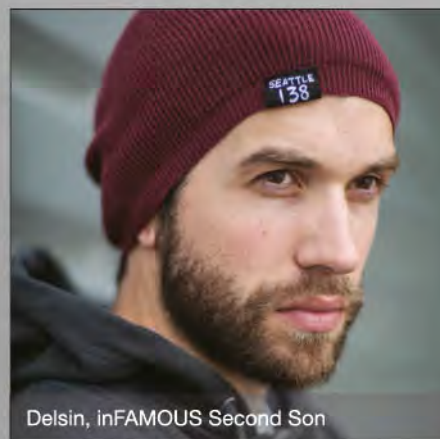
3rd Street Saints, Saints Row



Genki, Saints Row



Green Hill Running Club, Sonic



Delsin, inFAMOUS Second Son

Official limited edition gamer-wear since 2010.



WORLDWIDE DELIVERY!

Finalist
MCV Awards 2014
The market for computer & video games

All designs © Insert Coin Ltd.
For full legal information, visit
insertcoinclothing.com/legal.

EDGE EXCLUSIVE

15% OFF

CODE: COINWURST

Expires 31/12/14. One voucher per customer.
Not to be combined with any other
promotional discount, offer or voucher.

Disconnected

Out of the box and onto the shelf: is it time up for **Kinect** as a viable gaming device?

Whatever happened to Kinect? With the device now relegated to peripheral status, only a handful of Kinect games featured on E3's show floor and with little interest from developers or players, its life on Xbox One appears to be over before it got going.

When the original Kinect was revealed as Project Natal at E3 2009, it made Nintendo's Wii Remote seem like technology from the distant past. Some 24 million units sold and around 100 Kinect-only games on 360 put Microsoft's ambitious motion controller ahead of other latecomer console add-ons such as Sega's 32X, but with the majority of its software skewing towards fitness and party titles, and poorly reviewed at that, the first Kinect never built a reputation to match its financial success.

It saw creators inspired to produce curios such as *Rise Of Nightmares* and *Child Of Eden*, but even the best ideas were throttled by hardware limitations. Kinect's weaknesses were demonstrated best in two of its late-era 360 games: *Steel Battalion: Heavy Armor* and *Fable: The Journey*, both of which were near unplayable even in ideal conditions, at a time when the hardware was at its most mature and developers' understanding of it was at its most complete.

Kinect's reputation on 360 has done Xbox One's Kinect no favours either. To date, Xbox One has just five dedicated Kinect games – *Kinect Sports Rivals*, *Just Dance 2014*, *Fighter Within*, *Zumba Fitness World Party* and *Xbox Fitness* – with a few other titles supporting the device in nonessential ways. Harmonix's *Fantasia: Music Evolved* and *Dance*



Kinect Sports Rivals
creative director
Simon Woodroffe



Central Spotlight and *Through Games' Fru* are all due soon, but so few titles in 12 months barely justifies the \$100 that Kinect added to the price of every Xbox One. Microsoft seems to agree, and just six months after launch the camera has been made an optional extra once again. The market has spoken, too, with US Xbox One sales more than doubling in June, the month a Kinect-free option became available to consumers.

Developing for Kinect has always taken a special kind of creativity. "There are some constraints when you're designing for Kinect that you have to think about pretty carefully," *Kinect Sports Rivals* creative director, **Simon Woodroffe**, explained at July's Develop conference. "There are experiences Kinect can do that no other control method can do. I can't imagine a control scheme that would give as good a rock climbing experience as the one we did with Kinect. When it comes to shooting, though, it's fairly clear that Kinect and the accuracy of it wasn't a big friend of ours [for the Target Shooting game]. It would have been better if we had chosen a different sport."

Rare's four-part *Kinect Sports Rivals* teardown at July's Develop conference was a fascinating look at what it takes to build a Kinect game, and the studio's enthusiasm for and understanding of the device was made abundantly clear. Yet each session was attended by only a

handful of developers in a room meant for a hundred. Developers, it seems, don't care about Kinect, or Rare's case for it.

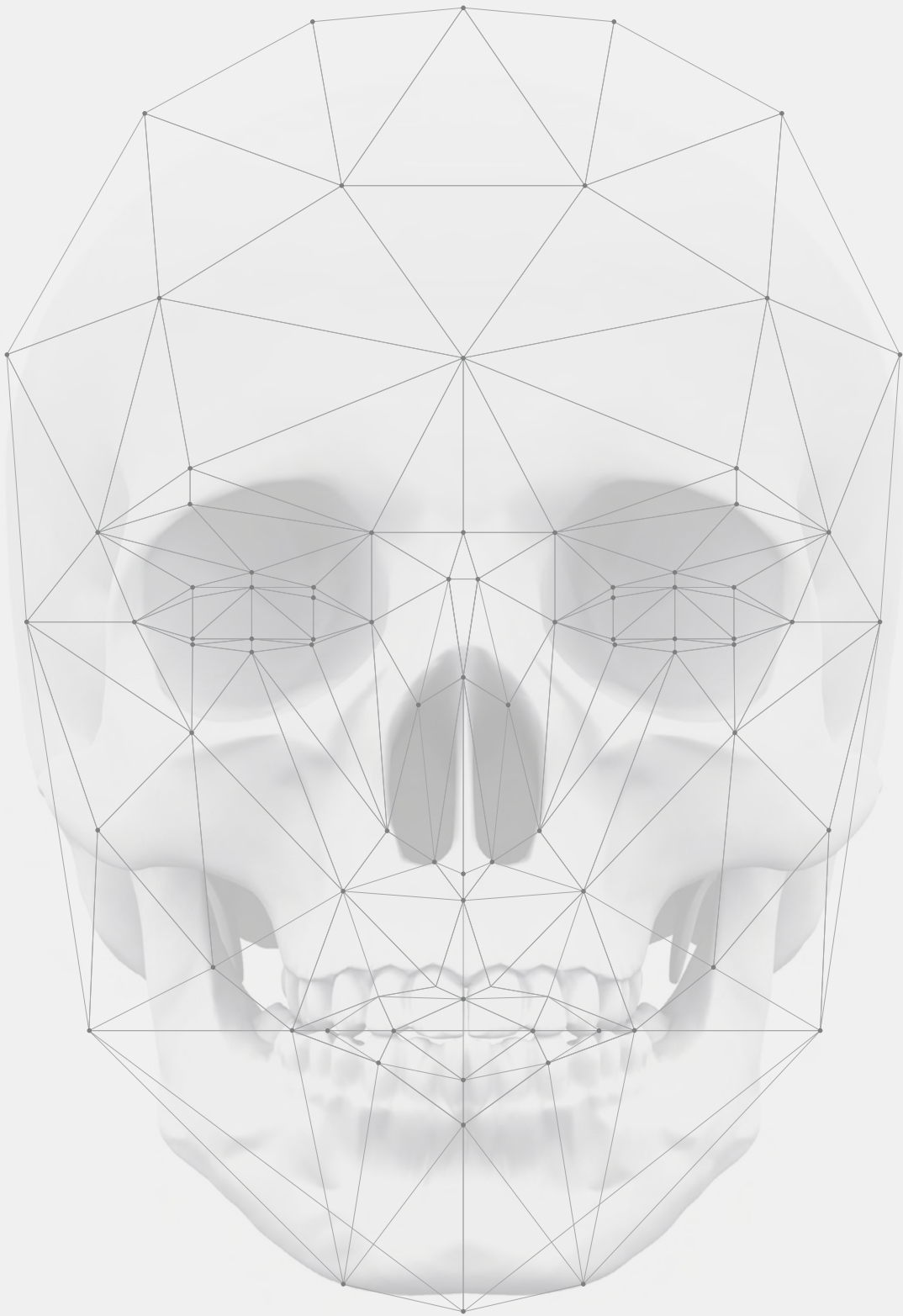
Rare's is a position of privilege as a Microsoft firstparty studio, too. *Kinect Sports Rivals'* Champion creation system feels like magic as the game builds a recognisable caricature of players, but Champion represents months of work and thousands of man-hours of research for Rare's team, working in collaboration with Kinect's designers in Redmond. Few others are lucky enough to have access to engineers who understand the device's constraints so well.

Those constraints were evident even back in the Project Natal days, when Avatars' knees would dislocate if the camera's view was obscured. At Rare, meanwhile, real mountain climbers proved *Kinect Sports'* most difficult test subjects, since they

attempted to use two-handed grips to climb the game's simulated mountains, occluding one hand with another. *Rivals* runs bespoke code in the background to compensate for the motions Kinect finds most baffling – again, a problem fixed by throwing months of research and coding at the problem.

Developing a Kinect game "is different on many levels," says **Mattia Traverso**, producer and designer of independent Kinect game *Fru*. "First and foremost, your design must consider the opportunity of players taking a break and sitting down, and [remember that] every person has a different size and height. ►

US Xbox One sales more than doubled in June, the month a Kinect-free option became available



PASSING FRU

"Playing party games is really fun, but sometimes you need a *Braid* or a *Limbo*," says Through Games' Mattia Traverso. "You need a game that leaves you with something after you play it." His Kinect game, *Fru*, was one of E3 2014's more engaging curiosities, a platformer in which the player's silhouette reveals hidden secrets. "All these party games have actually helped Kinect grow and sell to the more casual audience," he says. "Something very similar happened in the mobile gaming world, then *Sword & Sworcery* came out and changed the concept of what a mobile game could be. We hope to be the *Sword & Sworcery* of Kinect, showing that peculiar hardware can enhance an experience rather than curb it."

Motion gestures are not perfect every single time, and the player detection bugs out if the players are too close to each other. It's not too common, and it can be avoided once players learn how to move, but it can be annoying at first. It's not really Microsoft's fault; we can't expect Kinect to see behind players."

"You're dealing with so many different people's physiologies and their expectation of what an action is," says Rare's new technology lead engineer, **Nick Burton**. "When you put those two things together and you're detecting an action that's very small, while [seasoned players] could do it fine, there'll be a portion of your audience that can't because they're maybe too small, they're a long way away, they might have gloves on... You have to deal with all those problems in machine vision. If you need something that needs to be 100 per cent..."

"Use a controller," Woodroffe interjects with a laugh. "[With Kinect], you are *not* the controller; the controller is the controller, Kinect is Kinect, and a touchscreen is a touchscreen, and you should use the right input method for your experience. Even though we've got much increased accuracy and much increased reliability [with Kinect on Xbox One], it's not 100 per cent [accurate]. Things that separate the world into a binary action like shooting, if it's not 100 per cent, it's annoying, right? Using [Kinect] for things that are very specific like that is often quite hazardous, because you will never, ever get 100 per cent."

Perhaps it should be obvious, but Kinect games must be Kinect games to their very core. Ports never work, which made developing for the peripheral on 360 – as popular as it was – a gamble for any publisher. The original Kinect's limitations were financial, with its limited userbase; they were technical, with its latency and demands for space and optimal lighting conditions; and they were creative, with few developers able to make it work even when they wanted to.

The scepticism generated by the latter two areas might have been addressed by Xbox One's Kinect upgrade, with an IR



Fru, *Dance Central* and *Kinect Sports Rivals*' Champion character generator are all examples of Kinect at its best and most innovative. Kinect has the power to impress, but few can afford to invest the time and effort

light, faster response times, greater resolution and a wider field of view. And from a financial perspective, every Xbox One owner was sure to have one, guaranteeing developers could support it without fear of wasting effort. Instead, Kinect became a contributing factor to PS4's early lead over the console, and a boondoggle Microsoft would sideline.

Circumstances didn't help. Just two weeks after Microsoft announced its new console and plan to put a camera in every owner's home, Edward Snowden leaked the large-scale spying efforts of America's National Security Agency, and Microsoft's cooperation in the PRISM surveillance programme. Suddenly, Kinect's cameras became shorthand for the US government's own evil eye in your living room. Worse, Microsoft expected players to pay for the privilege with a \$100 markup over PS4.

The new Kinect always faced a battle against the tide. Motion-controlled gaming is a dying scene, a form of play all but abandoned even by Nintendo, which unsuccessfully attempted a retreat to the hands of the core gamer with Wii U. Motion control's moment was brief and

largely centred around Wii, and though it burned bright enough to create millions of new players, it was unsustainable as a phenomenon in its own right.

Instead, the accelerometers and cameras at the centre of the motion revolution have been repurposed. "What about Oculus Rift? What about Morpheus?" Frontier boss and Kinect developer **David Braben** asked at a Develop roundtable. "They are motion controllers. There are whole rafts of things to come in wearable tech. Just because one piece of technology hasn't worked as well as we'd hoped... you can still buy it; it hasn't gone away, it's just not bundled in the box."

Kinect's return to optional extra does not bode well for the future of the device, but it has positives, allowing Microsoft to match PS4's pricetag and put a halt to the resentment Kinect inspired. Players resented paying extra, resented having no choice, resented the absence of any games justifying the additional expense, and resented the perceived invasion of privacy. Microsoft relented.

"From a console offering point of view, yes, we've separated it, but we've

Rare singles out Target Shooting as one of *Kinect Sports Rivals*' missteps, but emphasises the hardware's strength with other events



given consumers two options," Rare chief **Craig Duncan** says. "You can still buy an Xbox with Kinect and you can buy Kinect separately. That's consumer choice. I think there's a misconception, like, 'Hey, we've stopped Kinect!' We haven't stopped Kinect, we've just given people a choice [in terms of] how they buy it."

While it must be tempting for invested studios to hope otherwise, that choice changes everything. "I fear that most indies won't start developing for Kinect now that the peripheral was unbundled [from the console]," Traverso says. "Even though there's five million units out there and big companies have proven that these games can be successful back in the Kinect 1 era, we can't expect to sell to every Xbox One owner any more. You could say that some of the guarantees that used to be there are gone, but if we can work for a year full-time on an idea we love, and the game that comes out is very good, I'd consider that a success."

"We can't expect to sell to every Xbox One owner any more. Some of the guarantees are gone"

Perhaps the failures of Kinect on 360 poisoned players against the technology in any form, or perhaps it was naive to expect developers to support a platform-exclusive motion controller when motion controls have fallen to the periphery of game developers' ambitions and game players' interests, but how much longer can the device survive now it's uncoupled from its host hardware?

Xbox One, however, looks only to benefit. Price, policies, privacy and power are the four issues Microsoft has worked to address over the past 12 months and today its console is a far more attractive proposition, as that leap in sales illustrates.

Xbox One is cheaper without Kinect, indies are on board, and Microsoft has become an unexpected campaigner for privacy. The power problem will depend on a magic bullet from DirectX 12, but even that has been eased by the removal of a mandatory Kinect chewing up GPU resources. As damning as it sounds, Xbox One may be better off alone.

What of those who already paid for one, though? Microsoft promises ongoing support for the five million Xbox One owners who bought a bundled Kinect, but there was little evidence of it onstage at E3 this year. Those early adopters can only hope more announcements are made soon; a single indie game and a new *Dance Central* do not justify the £80 of hardware sitting by the TV.

Perhaps Kinect will factor into Microsoft's virtual or augmented reality ambitions, but so far it has failed to provide a single compelling gaming reason for ever including Kinect in Xbox One's box. Every console and every peripheral needs its own *Super Mario 64* or *Halo*: a game so good it justifies ownership of the device. *Dance Central* came closest in idea and execution, and was a game that could exist only for Kinect, but in five years Microsoft's motion controller has been home to a single excellent game, a handful of average titles and countless terrible ones. As a game controller, then, Kinect has been on the verge of death for years, but it may take a few more before Microsoft is inclined to let it rest in peace. ■



Mattia Traverso, programmer and designer of *Fru*



Vane is an exploration-based puzzle-adventure game. The titular vanes, as seen above, are a central part of the game, as is a mechanic that enables the small boy in this screenshot to become the raven in the main image here

Brave new world

Developers from *The Last Guardian* and *Battlefield* strike out on their own with puzzle-adventure *Vane*

Think it's frustrating waiting to play *The Last Guardian*? Just imagine how the development team trying to get it done must feel. After seven years on the project at Team Ico within Sony's Japan Studio, and with no release yet announced, the game's Portuguese character and development artist **Rui Guerreiro** decided enough was enough. In March this year, he quit Sony and joined his Swedish friend **Rasmus Deguchi**, himself an environment artist on *The Last Guardian*, at new Tokyo-based startup Friend & Foe to pursue his own game: *Vane*.

Vane's concept GIFs on Friend & Foe's website reveal a game that has Team Ico written all over it, and the early trailer shown exclusively to us bears this out.

A young boy runs through a cel-shaded desert plain, sand kicking up at his heels as he avoids dramatic lightning strikes, before he encounters a mysterious derelict stone building surrounded by towers topped with golden-tipped weather vanes – to which the title refers. It looks

It looks intriguing, with the kind of scale that will be familiar to fans of *Ico* and *Shadow Of The Colossus*

intriguing, with the kind of scale that will be familiar to fans of *Ico* and *Shadow Of The Colossus*, rendered as an open-world puzzle-adventure game.

"The reason Rui ended up working on *The Last Guardian* is probably because that was the one place at that time where you could make this kind of game, and have this kind of creative outlet," Deguchi says when asked what debt the game owes to his previous project at Sony. "So to do this on an indie basis is just a natural continuation of getting to express the same thing."

"With more control over the whole project," Guerreiro notes, drily.

"The connection with *The Last Guardian* works for us and against us, in a sense, because after a while we're going to get sick of being compared to what we used to be doing," Deguchi says. "So we hope that this will get to stand on its own two legs."

Friend & Foe was founded in April, and the five-man team includes Swede **Thomas Lilja**, whose artist credits at Grin and Guerrilla Games include *Bionic Commando* and *Killzone 2*; Spaniard Victor Santaquiteria, formerly an artist on *Battlefield 3* at DICE; and Swede **Ivar Dahlberg**, previously a teacher of 3D game design at Playground Squad and fresh off the boat in Tokyo. The company folds in Lilja's for-hire unit Shapefarm, and

Deguchi's excitable pet dog Smokey as head network-cable chewer.

Details about *Vane* are still vague, and the team is happy to keep it that way. "What we can say is that it's not going to be about just wandering around and looking at things," Dahlberg says. "There's

going to be plenty of interaction, things to figure out. We are creating a world that you are free to explore on your own, but there is also a narrative that unfolds."

"If you want to transport someone to a strange new world, then you have to give them the freedom to explore," Deguchi says. The trailer reveals one unexpected game mechanic. At one point, the young protagonist transforms into a bird, leaping on human legs from a wall of the stone building to gracefully fly away on feathered wings. There will also be other characters, presumably enemies, since one of the towers is manned by a shadowy figure. The game's visual

SHOOTING GALLERY

Friend & Foe's other game, *Dangerous Men*, will be a nostalgia-driven shooter influenced by 1980s buddy-cop movies such as *Lethal Weapon*.

Santaquiteria is working on it in Stockholm, with support from the rest of the team in Tokyo. The likely primary platform will be PC. "It's an action-packed co-op-focused thing, I guess we can say," Deguchi reveals. "Anything crazy and outlandish about the '80s."

"Both visually and gameplay-wise it is at the complete opposite end of the spectrum from *Vane*," Dahlberg laughs. "But judging from the reaction, there seems to be a fanbase for both. I think they will attract very different audiences."



From left: Lilja, Dahlberg, Guerreiro and Deguchi established Friend & Foe's HQ in Tokyo, where most of the team had already made their homes

direction is deliberately limited to bold strokes rather than fine detail, since the team know all too well from their years on triple-A games that the time-draining creation of detailed assets can also make it harder to experiment with mechanics.

"We don't want to lock things down too early because we've been in so many developments where everything is set in stone," Lilja says. "And then you spend years making assets, and find that you were working in the wrong direction. We're keeping things very open with a very general direction and then it's going to evolve as we go along." After coming off a game as cloaked in mystery as *The Last Guardian*, the team intends to openly share *Vane*'s progression through devlogs, and they hope to have a booth in the indie section at Tokyo Game Show – ironically, on Sony's dime.

The company is entirely self-funded for now, though Lilja says he would consider signing its games to the right publisher. "The main thing for us is maintaining creative control," he says. And, speaking of control, we ask whether departed Team Ico visionary Fumito Ueda has given *Vane* his blessing. "No comment. He's as elusive as they come," Lilja says.

"Yeah," Deguchi adds. "If you think we're vague..." ■



Never tired

The creators of *Spintires* on the long, long road to an unlikely Steam smash

Spintires was in development for six years before it became the unlikely of Steam number ones for a few days in June. "It's not as complicated as you might think," says **Zane Saxton**, MD of Oovee Game Studios. "As the years went on, we just sort of ploughed more money and time into it."

Development on the muddy driving game began in 2008 as the brainchild of a lone Russian developer, Pavel Zagrebelnyy. After making a prototype that attracted the attention of Oovee, Zagrebelnyy teamed up with the UK developer to make his concept into a proper game, and they've been plugging away at it for years. In fact, they're still working on it today, weeks after release.

The effort paid off. At launch, *Spintires* occupied the number-one bestseller slot on Steam for a solid four days, right up until Steam's summer sale threw the charts into chaos. Eighteen days later, the team announced *Spintires* had sold more than 100,000 units.

"We were surprised to be number one," Saxton says. "I've always said to anyone who works for me, no matter what we do, we always try for the best. It wasn't too much of a surprise that it was going to be successful, but I wasn't expecting to get to number one when there's so many other good games in the [Steam bestsellers] list as well."

Spintires is a simple game about navigation and slow, methodical driving along mud-clogged Russian roads in heavyweight vehicles. As the trucks set out across the open-world maps to make their deliveries, their tyres chew up the country lanes and their sheer weight

collapses the makeshift wooden bridges. Mechanical shifting, all-wheel drive and a winch all come into play as drivers seek to navigate the difficult terrain and knee-deep mud. The most banal of mathematical conundrums – mud physics – became the most important contributing factor to the game's appeal, setting it aside from every other driving game. Saxton knows it, too.

"One of the things we noticed in the off-roading genre was that, at least as far as I know, there hasn't really been a mud deformation system," he says. "So that was the main focus of the game, and we sort of went from that."

"Originally, it wasn't as it is today," studio manager **Reece Bolton** says. "It was more just like cool mud particle effects that would come up behind the wheels. You could dig in a little bit, but it wasn't extensive. It was more like driving on really hard clay or something like that."

At first, the mud physics were similar to Sega Racing Studio's 2007 *Sega Rally* reboot, but by launch the muddy roads had become mires. Not only is the mud impressive in its realism, but also in its ability to retain permanent signs of your passage across the maps; *Spintires*' terrain is like nothing we've experienced in videogames before.

The mud was useless for a racer – *Spintires*' roads are driven at single-digit speeds – so during development it became a sort of puzzle game. "I always said from the start that I wanted it to be the muddy *Portal*," Saxton says. "You have to stop and think about what you're doing, and navigate. I think the navigation element and the fact that it's



From top: Zane Saxton, managing director of Oovee Game Studios; studio manager Reece Bolton

not linear was the bit we focused on and made sure it stayed that way. We also want stuff to be unpredictable – bridges and stuff like that. If you drive on the wrong side of a bridge, it'll twist and you can fall off."

The result is a game like no other, with a typical session lasting anywhere from seconds to hours, depending on how adept you become at handling the mud and reading the map. It's punishing, too – aggressive driving might get you down a boggy road but the damage you do along the way will leave it impassable for the return trip. Such quirks made *Spintires* a hit, but it's an unfinished gem.

After the game's warm reception, however, the studio has the money to keep working on it, and Bolton and Saxton have many additions planned. "What we want to do is add proper 3D cockpits with all the needles and gauges," Bolton says, "and then we want to change the dynamics of the handling, and implement a proper RPM system with a clutch, a proper gearstick system, steering wheel support..."

Oovee is already collaborating with Pole Position Production – a sound effects company responsible for vehicle sounds in the likes of *Battlefield: Bad Company 2* and *Driver: San Francisco* – on a new set of truck sounds for *Spintires*. Once some of the other improvements are implemented, a full overhaul of the trucks' throaty rumbles will follow. Oovee has every intention of turning *Spintires* into a long-lived project, and Saxton says that the engine the team built will allow it to do all sorts of other things, too. First off, it's talking with companies wanting to use *Spintires*' technology in training simulators. After six years' work, *Spintires*' creators are just getting started. ■





In order to more accurately capture the array of Soviet off-rovers that features in *Spintires*, Zane and Reece journeyed to see several different real-world trucks, and also engineered the opportunity to ride in one that had been transplanted to the UK

STARTING STRENGTH

Tracking the six-year development journey to *Spintires'* release



Starting from humble beginnings as a one-man project, *Spintires* didn't balloon too much over its six years of development. When the game was finally finished, the team was still only a core group of five developers, with another ten external people helping out. This, along with over £60,000 of Kickstarter funding to get over the final hump, kept development costs down and allowed the project to survive its long incubation phase. "We only asked for £40,000 [on Kickstarter] and we far exceeded that," says Reece. "It was nice to see that people were willing to put money in and sort of push the idea forwards."

GIG Challenge 2014: the winners

It's time to crown the top three entries in this year's **Get Into Games Challenge**



www.bit.ly/VxbEU1
More details on this year's GIG Challenge

This year's Get Into Games Challenge is now complete and, after three months of teams crunching across the globe, it's time to reveal the winners. Protest was the theme for the third of our annual coding competitions, inspiring some extremely creative interpretations and a diverse field of games that included RTSes, puzzlers, brawlers and even a rebellious-ant simulator.

We played every entry to whittle them down to a shortlist of ten, which then moved to the next stage. The final assessment was made by Lionhead and Games Workshop co-founder **Steve Jackson**; Unity CEO **David Helgason**; The Chinese Room creative director **Dan Pinchbeck**; **Lucas Pope**, creator of *Papers, Please*; as well as **Edge** editor-in-chief Tony Mott.

The winning game, **George Ing's** *One Minute To Midnight*, was the favourite of four out of the five judges. "*One Minute To Midnight* provides an ironic twist on the idea of protest as a force for good, depicting the player's campaign for social reform in the year 2029," Ing says. "Told through direct narration, it serves as an allegory about the dangers of populism and reactionary thinking."

The Chinese Room's Pinchbeck – whose latest game, *Everybody's Gone To*

"The style reminded me of Monument Valley, and the game would work great on iPad"



This year's GIG Challenge panel (from left): Steve Jackson, Dan Pinchbeck, David Helgason and Lucas Pope

The Rapture, features in Hype this issue – was impressed by the presentation and clever use of puzzle mechanics to meet the competition's theme. "It's a really lovely little game," Pinchbeck says. "It could easily be out there on the App Store now, which is the whole point, really."

Helgason agrees: "The style reminded me of *Monument Valley*, and, interestingly, the game would work great on iPad as well. The title has simple and intuitive controls, with new mechanics being introduced at a steady pace, keeping you engaged. Its economic presentation of narrative was also a success, as it often tied into the introduction of a new gameplay mechanic."

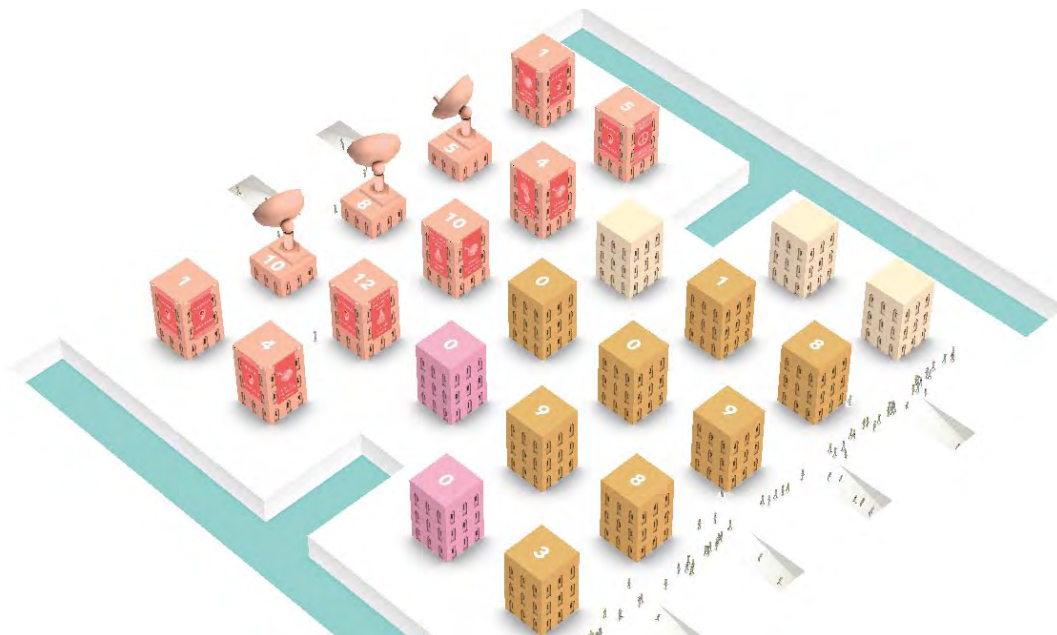
In second place, platform racer *Outcry* was developed by indie game duo **John Thompson** and John Farrimond, otherwise known as Warpfish. The

judges were divided over the game's interpretation of the theme, and most felt its unforgiving controls could be fine-tuned, but its assured presentation, appealing audio and solid concept earned Warpfish a podium finish.

Finally, Mike Chambers chose to build his game around the nautical definition of protest – a formal declaration made by a ship's master to mitigate or absolve themselves of liability for damaged goods due to misfortunes beyond their control – in *Nautical Protest*. Players must steer their boat between ports on a colourful globe, avoiding danger. "It's a creative interpretation of the theme, and [there's] plenty to do and learn," says Jackson, who picked the game as his top choice. "You lose a lot of ships before you get the hang of it, but this is a very impressive endeavour."

Outcry and *Nautical Protest* win a Unity Pro licence, while *One Minute To Midnight* wins a Pro licence and trip to this year's Unite conference in Seattle. ■





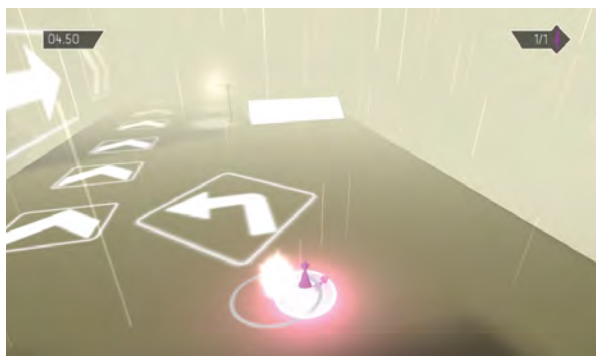
ONE MINUTE TO MIDNIGHT

Developer George Ing www.bit.ly/1rjVcVD

One Minute To Midnight is an RTS game in which you must assert your sociopolitical influence over opposing movements by occupying buildings. A crush of humanity enters the map from tunnels around the periphery, ready to be turned to a cause. First, you click a structure to occupy it and establish your base. A number on top of each building shows how many supporters are within, and you can drag from one of your structures onto another building to send the occupying followers on a hostile takeover bid, though you must outnumber your opponents to succeed. New elements are introduced steadily, including airports, which let you leaflet-bomb the enemy, and broadcasting stations, which have a chance of converting individuals wandering past.

"I really liked the fast pace required for victory," Pope says. "It connects well to the idea that things can move so quickly to sweep idealists into power and corrupt them. It reminded me of *Galcon*, and I like how the concepts tie in with the gameplay. In the later levels, for example, it can be more difficult to start with the high-quality buildings – it's better to build a base of strong basic buildings, then branch out to the airports, satellites and subways."

Jackson was less convinced of the gameplay's relevance to the protest theme, but couldn't find any flaws with the game itself. He praised the "interesting game mechanic, which would suit an old-fashioned war game", also commending "a clear tutorial and level progression".



OUTCRY

Developer Warflash www.bit.ly/1nOKlIt

In *Outcry*, you must guide a running figure and collect as many sympathisers as possible. The game uses a subdued colour palette and stylised characters to suggest a noirish thriller, albeit one in which you have to jump huge gaps.

"We believe protesting is about being heard by those that matter before it's too late," says Thompson. "A single voice is rarely enough. The loneliness of being ignored and the elation of finding kindred spirits are the central themes. *Outcry* is about finding like-minded individuals among the indifferent masses."

"It's beautifully presented, with much-appreciated controller support," Helgason says. "It's a curious way of interpreting the brief, which I liked. And it was also nice seeing a fresh approach to the platform genre. The controls were unforgiving, and it needs some fine-tuning, but it could be something special."



NAUTICAL PROTEST

Developer Mike Chambers www.bit.ly/1pe82jr

Nautical Protest is a top-down boating game in which you must deliver your cargo to port in the best condition possible. Encounters with other ships, tornados and icebergs will damage your stock and reduce the amount you'll be paid when you reach land. Take too much damage and your ship will sink.

"A creative interpretation of the theme – maybe too creative," Pope says. "But solid gameplay and mechanics, fun to play and the boat physics feel just right. Great presentation, too – feels very much like a good '90s game!"

That retro feel extends to the game's difficulty, though. "In this day and age, the frustration factor is unforgiving; you only get a few minutes to impress your audience," Jackson says. "It needs easy tutorial levels at the start and for the hazards and bonuses to be introduced gradually."

Fine young coders

We visit Helsinki to see how **Finnish education** is making programming a central part of the curriculum

At July's Develop conference, Eidos life president **Ian Livingstone** declared that the UK education system is stuck in a "Victorian broadcast model of talk and chalk". The government may have, after fierce lobbying, brought computer science back to the curriculum, but concern persists over the way children in UK schools are being told about how computers work, rather than finding out for themselves. Meanwhile, at Mustakivi Elementary School in Helsinki, Finland, we see second-graders navigate an avatar through a labyrinth using the programming tool Scratch. It's all part of a wider project about space which, alongside more typical teaching methods, uses experimental game-based learning as part of a government-funded initiative.

As well as the Scratch coding, pupils must also navigate an obstacle course in the gym, and make their way around the school in search of an energy source stolen by thieves. The children received their mission from **Captain Pekka Hummelin** who, when he's not wearing his captain's hat, is also a teacher at the school.

"It's important that the kids are able to have that experience of, 'Hey I made my character move. I decided two steps right, one step up,'" he tells us when we ask him about the coding segment of the project. "Whatever they want to do, they need to have the experience of, 'I made this possible!' After that, they're very into it. And they are working so socially."

"At first I thought it would be difficult, or that it would take a lot of time," adds school principal **Marianna Pohjonen**. "But when you come to think of it, it's a

lot of stuff we've already done – we just haven't understood that it's about using games in the teaching process. And the motivation of the children is huge when we start to do something like that. Everyone is involved, everyone listens."

The plan is to start teaching coding to second-graders as a standalone component, not just a way of teaching other subjects. And while Mustakivi is one of a small group of Finnish schools pioneering this approach to teaching, in 2016 the new curriculum will introduce elements of its thinking into all schools.

Petri Eskelinen, chief consultant at Helsinki's education department's media centre, is one of the driving forces behind the initiative. "This is a new way of

getting happiness into learning," he tells us. "My primary goal is establishing how to educate our teachers to use ICT [information and communications technology] in education. Our teachers have always used these methods – I believe that

in the UK and everywhere in the world teachers are using these methods – but when you define them, that's when you can put together something new."

Through this initiative, many Finnish game studios are making their tools and games free to students and teachers, as well entering into discussions on the best way to teach ICT and coding to young minds. But it's not only game developers that are inspiring new coders. Creative technology company Reaktor offers consultancy and tech solutions for other businesses, improving websites and

building mobile apps. But it has also built Koodikoulu (Code School), which provides free programming classes to parents and their children.

The project started when consultant Juha Paananen decided to teach his four-year-old daughter how to use a computer, and started a blog called Girls Can't Code to track her progress. He was soon getting requests from colleagues to teach their children. Reaktor, recognising its appeal, put the call out to the public via Twitter expecting to cater to 15 or so children. It received 300 applications.

"That's when we realised we couldn't do this by ourselves," Reaktor's head of marketing tells us. "So we called out to other Finnish companies and many joined in, all holding their own coding schools. They don't pay us, they don't even have to tell us, but if they want to they can and then we'll help them promote it. Even now, if someone puts on a coding school, it's full in five minutes. There's a huge demand for it."

It's a demand recognised by Happi, a youth centre in Helsinki. It recently added coding to its range of activities, and hosts a number of game-related sessions, including a game development group that is supported by professionals from studios such as Rovio, Bugbear and Remedy, which guide teens through the creation of classic arcade game clones.

Asked whether there is any need to teach coding from such a young age, Pohjonen is emphatic: "It's not compulsory yet, but why not teach coding? Because we can, and it's easy, and they learn very easily. And there's less capacity to feel like you're failing when you can attack problems from different angles."

Let's hope education chiefs outside of Finland are paying attention. ■



Petri Eskelinen is responsible for the development and implementation of the ICT programme in Helsinki's schools

Many Finnish game studios are making their tools and games free to students and teachers



During the last stage of the space project, students are given free run of the school, echoing the freedom Finnish teachers have to interpret the curriculum

Hummelin guides fifth-graders as they create their own games in Kodu Labs. Older students also help teach second-graders



Despite being located in an underprivileged area of Helsinki, Mustakivi Elementary is a spacious and well-equipped school, with an ambitious approach to education



HAPPI CHILDREN

Teaching kids the value of videogames



Helsinki youth centre Happi also works with teachers, social workers and youth workers to teach the importance of videogames to young people and how they factor into their lives. "For ten-to-19-year-old Finnish youngsters, it's something like 94.7 per cent that play games regularly," Happi's Pasi Tuominen tells us. "They're such a big part of everyday life, it's only natural to expand youth work towards gaming. Most of the time when parents see their kid playing a game, it's like, 'Why don't you go outside and play?' But the reality is that the kid may be having a really good social conversation at the time when he is playing."

SCREEN SHOCK

Elite's screengrabbing tool offers astronomical fidelity

With all the hype surrounding *No Man's Sky* after E3, you'd be forgiven for forgetting about *Elite: Dangerous*'s similarly ambitious goal of accurately rendering our entire solar system and much of the universe beyond. Scales of this magnitude are difficult to conceptualise, but Frontier is at least letting you capture the view in exquisite detail. Hit F10 and you'll get a regular screengrab, but hold Alt+F10 and the game will spit out an image at four times the resolution *Dangerous* is currently running in. If you're playing the game in 1080p, then, you'll end up with a 7,680x4,320 pixel screenshot. A 4K setup will give an astounding 15,360x8,640-pixel image.

"This was a feature we wanted for creating shots for full-page print coverage and posters," Frontier founder **David Braben** tells us, "and we knew the game assets could take those super-high resolutions."

* When you take an image at this scale, the game runs for one frame at the relevant resolution, causing it to stutter slightly in the process. It's tempting to toy with the idea of running the game at these resolutions indefinitely, but it will be a little time yet before that's possible.

"The game wouldn't run smoothly at 8K on any graphics card available today, and they don't support 8K yet, anyway," says Braben. "But that's not to say they won't in a few years' time! It is possible, in theory at least." ■





The highest-pixel-count images from the Hubble telescope are some 29,000x14,000px in size. At 4K settings, *Dangerous* is able to render starfields and starports at an appreciable fraction of that

Soundbytes

Game commentary in snack-sized mouthfuls



"The majority of what the other developers exhibited [at E3] was **bloody shooter software...** This is a revelation of creative immaturity."

An unusually outspoken **Shigeru Miyamoto** has a few choice words to level at gaming's ongoing claret fetish



"Battleborn is: **FPS; hobby-grade co-op campaign; genre-blended, multi-mode competitive e-sports; meta-growth, choice + epic Battleborn Heroes!**"

Gearbox boss **Randy Pitchford** tries to avoid calling his new game a MOBA. It's a MOBA



"Unless you are using a screen that's more than 60 inches big, **I defy you to really see the difference.** I personally struggle to see the difference."

Microsoft's **Harvey Eagle** on the Xbox One resolution gap. Perhaps he needs a smaller living room

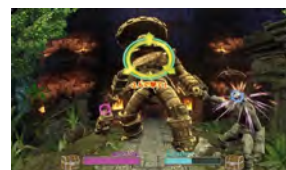
"Most people in the game industry are there because they like making games. They want you to play them because they're fun, not [for their] **cheap psychological tricks.**"

MMOG pioneer **Richard Bartle**, one of the men behind *MUD*, predicts the eventual death of the free-to-play model



ARCADE WATCH

Keeping an eye on the coin-op gaming scene



Game *Lost Land Adventure*
Manufacturer Bandai Namco

Bandai Namco's Panoramic Optical Display cabinet is the best kind of arcade gimmick, surrounding players with a curved screen that's impossible to replicate at home. The POD has been used for two games in Japan, housing a single player inside a cockpit with a single display filling their vision. But why stop there?

Lost Land Adventure flexes Bandai Namco's hardware patents and doubles the screen's size and depth for a twoplayer co-op shooter set amid haunted temples on a lost island, housing the lot in a towering crate of a cabinet with a pricetag and a footprint most arcades couldn't possibly risk accommodating. Built in Unreal 3 and clearly inspired by Bandai Namco's own *Deadstorm Pirates*, *Lost Land*'s other gimmick is its treasure collection system, which players can save between games.

POD was first built to house 2006's *Gundam: Bonds Of The Battlefield*. The game's popularity ensured a monopoly on the hardware's USP for years, until the cabinet was repurposed for *Mach Storm* in 2013. *BOTB* never made it west, but with *Lost Land* clearly aimed at a more casual – and more western – audience, you can expect it to pop up outside of Japan later this year.





WE HIRE **EXCEPTIONAL PEOPLE**
SO WE CAN MAKE **AMAZING THINGS**

LONDON • OXFORD • **BossAlien**
NATURALMOTION**CAREERS**.COM

My Favourite Game

Marty Friedman

The guitar god and former Megadeth man on conquering Pong, losing at Taiko No Tatsujin, and rocking out for otaku

Before teaching himself guitar, **Marty Friedman** taught himself *Pac-Man* routines and bested his entire city at *Pong*. His rise to superstardom stole his focus from games, but he regularly contributes music to titles in Japan, his home since 2003. He tells us how a Wii *Taiko No Tatsujin* set saved his dignity on Japanese TV.

When did you start playing videogames?

When I was a little kid, I loved pinball, and I was champion of the Washington DC area at *Pong*. I entered this contest when I was eight or nine, and played against the whole city of Washington. The football player from the Washington Redskins gave me some kind of prize. And then *Pac-Man* came out, and I got super good at that. Once you find the pattern in *Pac-Man*, you can play endlessly and get high scores. So I got the pattern and I was good at it. But then I started to play music for real, and once I got serious, all that energy went into making music and I went cold turkey on games. But it was a guilty pleasure. I loved *Q*bert* and *Missile Command*.

As a self-taught musician with an unusually complex style, do you see parallels between learning guitar and learning the intricacies of *Pac-Man*?

No, I think the parallel would be that you're using your brain. In videogames I think you have to be creative and you have to use the synapses in your brain that work really fast, so that's probably something they have in common, but that's a very mechanical part of making music. The rest comes from the cones.

FORGING METAL

Having honed his original guitar style in renowned San Francisco band Cacophony, Marty Friedman joined metal heavyweights Megadeth in 1990, recording five albums including the Grammy-nominated *Rust In Peace*. After falling in love with Japanese music during Megadeth's many world tours, he quit the band in 2000 and relocated to Tokyo – where he became a superstar all over again, playing and writing music for major Japanese artists and making hundreds of TV appearances. His new solo album, *Inferno*, is out now.

How have videogames touched your life as a musician?

I've made a lot of music that's been used in games, and I do a lot of instrumental music that's really like an amusement park of metal – there are a lot of ups and downs and fast turns, and it's really suited for videogame music. I played at the press conference for *Guitar Hero 3* in Japan [in 2007] – they've had similar games in arcades here for years.

Have game consoles always been fixtures when you've been on tour?

Yeah, everyone's got a PlayStation or Xbox, and it's totally rad.

I played *Grand Theft Auto* [on a tour bus]. The imagination they put into the game is where the fun is for me, because it takes a lot of time to get decent at these games. With pinball you could shake it and rock it... but you have

to be quite dedicated to get past the first couple of levels of a videogame.

What do you think of music games?

I played *Taiko No Tatsujin* on a TV show... They had it at the game centre down the street [from my house], so I practised there. Those guys are insane down there, but I practised and practised... I really didn't want to make an ass of myself on TV. I did pretty good, considering. I lost, but at least it was fair.

What sort of games don't you like?

I'm not so much into shooting games. I understand the appeal of shooting a

bunch of people in a game and getting points. It feels good. I get that, but I'm so content and happy with what I do that I just don't want to hurt anybody [laughs].

You were involved with the music for *Bravely Default*, right?

Yes. Revo from [the band] Sound Horizon came to me with a song that he had written for that game and we worked on it together in the studio, and I played on the single. I played the concert too, and that's a whole new subculture... the otaku fans are really into this fairytale world.

When you make music for videogames, do you write in a different way?

Sometimes they say, "We're making this kind of game, it's about this, write a song for it" – that's easy. One time it was quite difficult because they had things that happen at certain

periods of time, like at 16 seconds it's got to have a stop, at 24 seconds it's got to play something fast, lots of specific things.

What's your favourite game of all time?

Definitely *Q*bert*. If they made a new *Q*bert* game I would love to play it. The concept is simple, but to get good at it is hard – that's the same as music. You can explain *Q*bert* easily: you jump on the cubes and don't fall off the cliff. That's it. But you get into the flow. Another common thing with music is the flow. The longer you play music, the longer you're in the zone, and eventually you're in the zone all the time. ■





Marty Friedman's celebrity status in Japan has seen him work with the cream of Japanese music, from Momoiro Clover Z to Sayuri Ishikawa, and as a musical mascot for games such as *Guitar Hero 3* and *Bravely Default*: Flying Fairy

WEBSITE

A reading list for devs
www.bit.ly/devreading
London-based developer George Buckenham is a co-organiser of the Wild Rumpus events and has helped organise game jams. His latest gift to the development community, however, is this collation of recommended reading for anyone with an interest in how games are made. Buckenham's list is not just about design, though there's plenty of that, with Robert Yang, Michael Brough and Anna Anthropy among those featured. It dips into how to handle the press, synthetic psychology, and spreads beyond games, too, with a Terry Gilliam animation masterclass and seminal music marketing guide *The Manual* (Or, How To Have A Number One The Easy Way). It's a comprehensive study that shows success takes more than mucking about in GameMaker and being gobby on Twitter.



VIDEO

BlazBlue at Evo 2014
www.bit.ly/bbevo14
Capcom's games may still be the most popular ones at the annual Evo championships, but the greatest match this year came in the finals for *BlazBlue: Chrono Phantasma*. Fighting games are often criticised for being impenetrable to newcomers, but you don't need a degree in footsies to follow as Litchi player Garireo pulls off comeback after comeback against Dogura's Azrael. Coming from two-nil down in the second best-of-five set, Garireo delights an increasingly disbelieving crowd and casters, prompting this fine punditry: "This man is not human! This man is a legend! This is the birth of a god!"

WEB GAME

The Cave Of Atman
www.bit.ly/caveatman
With *Dark Souls* influencing even the biggest games, it's no surprise to see it informing the smallest ones too. So when *Cave Of Atman* opens by telling you that the aura of fallen enemies toughens up your band of warriors, it's tempting to write it off as yet another *Souls*-like. Yet there's more to this dungeon-crawling puzzle game than that sparse tutorial text suggests. Units have a movement range, can only attack once per level, and block each other's paths. Even so, that *Souls* influence is critical. You can only kill the most powerful enemies by first collecting the souls left by the weaker ones, and must arrange your kills to ensure your party's final member can collect every fallen soul on their way to the boss. In other words, it's smart stuff, and in the *Souls* tradition, quickly gets incredibly difficult.



v21

I make games and things.

THIS MONTH ON EDGE

When we weren't doing everything else, we were thinking about stuff like this

FILM

Video Games: The Movie
www.bit.ly/vgmovie

Jeremy Snead's Kickstarter-funded documentary seeks to tell the story of videogames in 100 minutes. If that sounds like a tall order, it's because it is. Lacking a central premise, Snead instead spends his hour and 40 minutes flitting endlessly around a timeline trying, and failing, to stitch it all together coherently. Some two-dozen talking heads should have helped, but exec producer Zach Braff and his *Scrubs* co-star Donald Faison have little to say, and there are far too many marketing men. Reggie Fils-Aime has the blandest of high praise for NES and SNES, while the inevitable future-gazing late on focuses solely on VR, with input from Oculus VR founder Palmer Luckey and Oculus investor Cliff Bleszinski. Snead's goal is a noble one, but this is too big, and rich, an industry to be condensed into a single film.



continue

Evo 2k14

The premier fighting game tournament just gets better every year

Dota 2 broadcast for newcomers

Valve's T14 stream offered a vital entry point for the eSports

Their own Volition

The *Saints Row* studio takes on 100 new staff

Free to pay

UK watchdog says calling *Dungeon Keeper* F2P is "misleading"

quit

Early Access

Microsoft and Sony say devs are asking for it. Please ignore them

Monty Python's auto-runner

Another treasure gets stomped on in the race for App Store lucre

Homefront trouble

Walkouts at Crytek UK as staff go unpaid

Summertime

Our longest-serving PS3 finally keels over as the July heat gets a bit much

TWEETS

Why is games the only industry where people ask "so you get to play games all day?" If I'm a cook, do they say "you eat all day?"

Jamie Cheng @biiigfoot
Founder, Klei

FUN FACT: there's a bug in all modern programming languages that unless you hold down F9 when starting a new project your game will be a MOBA
Dan Marshall @danthat
Founder, Size Five Games

As an ex-games journalist, reading a 40-page E3 report, likely written by two people in a couple of days, triggers PTSD
Giordano Contestabile @giordanobc
VP, Tilting Point



www.twitter.com/edgeonline
Follow Edge on Twitter



Find your perfect match

If you've had enough of wasting time trying to find the best deals online, **bespoke offers** could be your best friend for finding bargains

With the summer holidays upon us, now is a good time to pick up a new tablet to accompany you for some leisurely videogame time, whether that's on a beach in Southern France or in the back garden. But you don't want to pay full price, or waste time scraping around the depths of the Internet for what you need. Enter **bespoke offers**. More than a place to strike a good bargain, **bespoke offers** selects deals that are based on your interests and where you shop, ensuring a perfect match for you – and your wallet – every time you visit.

Since it tailors offers based on your actual spending habits as well as likes and interests, **bespoke offers** makes it easier for you to find deals for the things you want to buy, rather than wasting hours looking elsewhere. Hundreds of money-

saving offers from big brands and local businesses across the UK are listed, under all sorts of categories. The range of offers is huge, and includes deals on everything from gadgets and other electrical goods to leisure activities, holidays and fashion.

The service costs absolutely nothing to use, and there's no obligation for you to buy.

GO TO
**www.bespoke
offers.co.uk**
TODAY

In addition, although **bespoke offers** is the brainchild of Barclaycard, you don't need to be a Barclays customer to take advantage of it.

To try out **bespoke offers**, register at www.bespokeoffers.co.uk or, if you're using an Android or Apple smartphone or tablet, download the newly revamped app from Google Play or Apple's App Store. ■

To try **bespoke offers** for yourself, register at

 **bespokeoffers.co.uk**

Or download the recently updated apps on Google Play or the Apple App Store on to your smartphone or tablet

DISPATCHES

SEPTEMBER



Issue 269

Dialogue

Send your views, using 'Dialogue' as the subject line, to edge@futurenet.com. Our letter of the month wins its sender an Atlas headset from Turtle Beach Inc



Turtle Beach's **Atlas** headset (RRP £119.99) is compatible with 360, Xbox One and PC setups



Women versus tropes

After seeing your recent article [on Edge Online] regarding the presentation of women and girls in modern videogames, I felt compelled to voice my growing concern over this topic.

I was delighted that your writer managed to conduct a level-headed analysis of the current state of gender roles in the industry without acknowledging the infamous Tropes Vs Women In Video Games video series by Anita Sarkeesian. While I have nothing against Sarkeesian or her content, I feel that this is an overused example of the voice for the 'other side', however detestable that concept may be. What could be a deeply meaningful debate has degenerated into a primitive 'us and them' affair, with each 'side' exchanging words laden with prejudice, misinformation and belligerence.

I feel that many involved in the industry today fully support the intention, but take issue with its method. There is no doubt that there is simply not enough female influence in the game industry. However, the way to instigate change is not to accuse the audience of apathetically adopting an assumed standpoint that one takes to play the games that she cites. The presentation of women in many videogames is abominable, but it does not warrant the extent to which Sarkeesian's work inflicts generalised judgement upon those who play them.

The process to make the game industry a more diverse, equal place must not become one of studios begrudgingly submitting to extreme feminist doctrines at the hark of the few – it must come as a request from players and gamers as a whole.

Unfortunately, there are still far too many examples of games and franchises where the sexualisation of women is the norm. Some argue that this is as a result of

these games only holding appeal to male gamers, but this is simply untrue. As the medium evolves into something more mature, thematic and story-driven, so too must the views of its audience. I couldn't be happier to see the beginnings of a unified movement to abolish antiquated female stereotypes. I wish to be able to share my love of games with my more conservative friends and family without having to justify the awkwardly immature sexualised content marketed at teenage males with a penchant for anatomically impossible cartoon breasts.

Playing *The Last Of Us* has had a truly incalculable effect on my outlook, and not just toward games, but life as a whole. *The*

Last Of Us was a rewarding, insightful and terrifying experience. It wasn't until I was carrying Ellie toward the lift in the hospital at the very end of the game that I realised how much I had become attached to her character. The very fact that this is an alien notion to me made me realise how much writing in games as a whole

needs to change. I sincerely hope that others begin to learn from such masterpieces and follow suit – hopefully constructing more emotive and powerful plots and characters, and helping the industry clamber out of the crater of ignorance.

Tom Colebrooke

Characterisation and sexualisation are two different parts of the same problem, and while Sarkeesian might not be the debate's most eloquent voice, she is at least one of the best known. We'll need more like her if we're ever going to see real change. In the meantime, an Atlas headset is on its way.

Nostalgia trip

So I was browsing through the chaos that my PC calls My Documents when I stumbled across a New Folder. It's unlike

"TLOU has had a truly incalculable effect on my outlook, and not just toward games, but life"



www.facebook.com/
edgeonline
Discuss gaming topics with
fellow Edge readers

me to not rename a folder, so my intrigue forced me to take a look inside. Inside were a bunch of MP3 files, again unnamed. I imported them to iTunes with a sense of excited fear; they could have either been a compilation of 1970s rock that my dad had me import before he learnt how to navigate iTunes, or a hidden treasure wrapped in ancient memories.

To my luck, it was the latter. A random mishmash of some favourite songs from some favourite childhood games. Needless to say, I turned the volume up, clicked Repeat, and hit play.

Despite being only 21 years old, I began to reminisce about the good old days and the countless hours I sunk into these games. And not because they had solid online multiplayer, hyper-realistic graphics running at 1080p60, or even because of some super-easy Achievements and Trophies, but because they were good old-fashioned fun. Oh, and with a kick-ass soundtrack. This made me think about the kind of gaming I do today, and how it's become more difficult to have fun while doing so.

My main console is an Xbox One, a powerful machine offering a wide variety of games, a decent online network and plenty of media apps. Now I know there'll be some PS4 users reading this thinking, 'That's a load of rubbish. Xbone sucks, PS4 rules.' Fanboys take the fun out of gaming. You could be watching an Xbox Let's Play on YouTube. Scroll down to the comments and all you see is fanboys getting angry at Xbox fans for playing a game that might not run at 1080p. Seeing the community so heavily divided because of little details like this makes me confused and a little bit angry. Back in my day, fanboys weren't a thing. I had a PlayStation and my friend had a Sega console of some kind, but that didn't matter. I would go to his house and play *Sonic*; he'd come to my house and play *Gran Turismo*. The fact that our consoles came from different manufacturers was irrelevant.

I'm sure that all of you out there have at some point played online. The ability to connect and play with players and friends all over the world is amazing, allowing you to meet and interact with new, like-minded people. But everyone has been in a lobby at some point with a screaming kid who probably isn't even old enough to buy the game he's playing. I understand that it's frustrating to lose your killstreak because of a spawn camper with a shotty, but seriously, is there any need for the eardrum-piercing screeches? This can often be enough for me to leave the game, turn off my Xbox and just go read a book.

My last point is regarding Xbox Achievements, though I'm sure the same could be said for the Trophy system on PlayStation. I'm a little bit OCD, so it pains me to see a game at 98 per cent completion. The last few Achievements are typically 'Reach level 100 in multiplayer' or similar. I'm now sinking hours and hours into a game, wishing I were pulling my own eyes out rather than doing this, just to hear the (incredibly satisfying) da-ding of an Achievement being unlocked.

As I said, I'm only 21, so reminiscing is probably something I shouldn't yet be doing. Yet I find myself wishing I could go back to the care-free summer holidays spent trying to perform the pixelated Liu Kang fatality in *Mortal Kombat*. Wishing I could sit on the couch with a few mates without anyone having a temper tantrum when I knock them off the stage in *Super Smash Bros*. Wishing I could play a game, and want to play a game, because it was – plain and simple – fun.

Alex Marshall

It's the exclusives, stupid

I recently purchased a £200 machine for playing the game *Dragon's Crown*, a PS Vita. The sting of the purchase was softened slightly by my decision to trade in my Xbox 360 – or, as I have come to think of it lately, 'That filthy lodestone that

doesn't have *The Last Of Us*, never got *Demon's Souls*, and somehow suckled three rancid sequels to *Gears Of War* but couldn't nurture even one for the objectively superior *Vanquish*.'

E3 2014 seemed to bring parity between the two main contenders in the console war. Both forces posted a modest list of exclusives. Xbox One's *Sunset Overdrive* makes PlayStation 4's *Infamous: Second Son* look dingy and turgid; meanwhile, *Bloodborne* makes all other human art and endeavour look meaningless and shallow (yes, I'm a FromSoftware fanboy.)

If last year's E3 was a triumphant Sony blitzkrieg, aided by enough Microsoft incompetence to warrant the summary execution of many Redmond generals (or at least Don Mattrick), then this E3 marks the beginning of the real conflict – lethal sorties into no man's land desperately hoping that the latest exclusive will be the one to turn the tide.

With its identikit AMD PCs posing as consoles, this new generation of hardware has highlighted more than ever what has always been the case: the only thing to choose between is the games. Surfing the PlayStation Store, I'm struck by the quality of classic RPGs available on the original PlayStation – and I pity the Nintendo crowd trapped with only *Zelda* for comfort (particularly in the UK market, where we never saw *Tactics Ogre*.)

This generation of the console war has no hardware differences and few developers who aren't flying the multiplatform flag. It's going to be very close.

Timothy Franklin

And yet the focus of online debate has been what separates the two systems, rather than unites them. Once the exclusives start to flow, that may change, but does either PS4 or Xbox One have a single system-selling exclusive yet? And if games really are going to decide the winner, where will Nintendo end up in all of this? ■



STEVEN POOLE

Trigger Happy

Shoot first, ask questions later

Sixty years ago, a man first ran a mile in under four minutes: an amazing feat of skill and determination. It is surely a fitting anniversary tribute to that landmark that in 2014, someone first completed *Super Mario Bros* in under five minutes. The player goes by the name Blubbler, and the video of his microathletic triumph is hypnotic in its fanatical dedication, with perfect jumps missing Piranha Plants by mere pixels, and every possible exploit used to shave frames off his run. “One tricky moment in level 82,” explains **Tom Phillips** of Eurogamer, “sees Blubbler skip the post-flagpole walk to the castle by arriving at the same time as a passing Bullet Bill.”

This, then, is how *Super Mario Bros* would play itself, if it could. There is a certain machinic, inhuman quality to the run. Indeed, it’s hard even to be sure that it really counts as playing the game, since the requirements of accuracy and speed override any sense of style. (Similarly, a strong human chess player might choose a decisive move that has flair, even irony, in a given position, whereas a computer engine will just brutally select the move that gives the maximum possible numerical advantage.) Yet we value a kind of machinic efficiency in athletic sports (“he’s a machine,” people say admiringly), and Roger Bannister could not afford to add a few fancy steps and pirouettes when pursuing his four-minute mile either. So let us say that the *SMB* speedrun ‘expands’ the semantics of what it means to play a game.

Expansive of the sense of play in a different way is the kind of speedrun of epic adventure games in times that at first seem like misprints. *Ocarina Of Time* in 20 minutes? It can, in fact, be done, as I was happy to learn on watching a video of the live playthrough by **Cosmo Wright** in 2013. This is speedrun as live event, in which the runner comments on and, as it were, annotates the performance.

Here the performer, an amiable guy in a T-shirt and Nepalese hat, narrates the



Wright is always trying to break the game, but he does it as an expression of love for the art object he is abusing

history of how what he is doing came to be possible while he is doing it. “Years ago, in 2005,” Wright explains early on, setting the scene, “it was mostly ‘natural route’: you’d just kind of go through the game in the order intended. And then people realised: ‘Oh, well we can probably skip the Lens Of Truth if we, like, memorise the Wasteland.’”

He doesn’t mean memorising the immortal modernist poem by TS Eliot, but what is fascinating about this performance is actually something analogous to a literary historical texture. Throughout, Wright is careful to give appropriate credit to the

pathfinding individuals who discovered certain shortcuts. “In 2006, Kazooie, he’s from Finland, and he found a ton of stuff, including Shadow Temple Early [an exploit].” In effect, Wright is footnoting his own performance as a communal effort.

The fascinating paradox is that Wright and his comrades are always trying to break the game – to exploit glitches and bugs so as to bypass swathes of it – but they do it as a fierce expression of love and admiration for the art object they are abusing. Some of their exploits show off how the game systems still function reliably even when levels are played in the wrong order; others are more controversial, such as avoiding the fight with Ganondorf by warping straight to the end credits. But all are done in a spirit of wondering exploration (‘discoveries’ are cited and dated), and play just as any ‘normal’ encounter with the game. “It’s like such a cool game,” Wright says, “and I’m really fascinated personally... by the huge number of interesting things you can do in different games, like seeing what’s actually possible without cheating.”

Thus the game system, to such scholarly scrutineers, not only contains the ‘puzzles’ that the game designers have deliberately engineered into it, but the game itself is a giant puzzle to see how far the engine can be stretched for a speedrun without breaking. Commenting on the current state-of-the-art route through *Ocarina*, Wright says: “It’s almost like, once again, the game’s finally been solved – but it is *Ocarina Of Time* so, you know...” The audience laughs. “Who knows, really?”

And so the perfect speedrun is another kind of ‘solution’ to the game design – one that, like a scientific theory, is always open to improvement. As the hero is told, with amusingly little time for celebration, at the end of *Super Mario Bros*: “Your quest is over. We present you a new quest.”

Steven Poole’s *Trigger Happy 2.0* is now available from Amazon. Visit him online at www.stevenpoole.net

Our digital edition is now available on a wide range of devices



Start your free trial today*



*Free trial not available on Zinio



IAN BOGOST

Difficulty Switch

Hard game criticism

Back in 1982, a tagline for *Microsoft Flight Simulator* boasted, “If flying your IBM PC got any more realistic, you’d need a licence.” It was meant to appeal to real pilots and those who fancied themselves armchair aviators. I was neither, but I played *Flight Simulator* anyway. Well, I loaded and manipulated *Flight Simulator*; to say that I simulated flight would be a profound overstatement. In that sense, the advert rings true: *Flight Simulator* was realistic enough that it became as unyielding as a small aircraft’s cockpit to my inexperienced hands.

The term ‘simulator’ has a troubled relationship with videogames. Traditionally, simulator has referred to complex, expensive software and hardware recreations of military and commercial equipment for training purposes. In these cases, simulators entail realism and detail and professionalism and seriousness. Videogames borrowed and altered the term, using it to refer to a serious enthusiast’s next best thing, something squarely between tool and entertainment.

Games such as *Flight Simulator* and *Train Simulator* remained niche products for years. But against all odds, in the era of pay-to-win mobile games and stylised open-world fantasy romps, simulators have experienced a resurgence. Dozens of such games have found their way onto shelves and Steam, including *Airport Simulator*, *Farming Simulator*, *Car Mechanic Simulator*, *Skyscraper Simulator*. Most of these games allow the player to pursue a virtual career in their chosen expertise, which involves the day-to-day activity of a mundane profession.

Most of the new simulators acknowledge the influence of *Microsoft Flight Simulator*, even if only by adopting the characteristically thin and oblique typography of its packaging. But in practice, today’s titles reveal a more complex relationship between the pleasure of games and the austerity of simulators. They are not simulations of their chosen subjects so much as they are representations of the difference between simulators and games.



Against all odds, in the era of stylised open-world fantasy romps, simulators have experienced a resurgence

Consider *Euro Truck Simulator 2*. It offers the usual invitation to a career (freight hauler), but the primary experience of the game is that of driving a tractor-trailer across the bucolic European countryside. For those accustomed to games such as *GTA*, the most notable sensation in *Euro Truck Simulator 2* is that of having to stay in the lanes, avoid collisions and follow basic traffic laws. Such activities are not optional as they might be in an open-world game, since infractions and vehicle damage severely impact the player’s ability to drive the truck to its goal and thereby advance in the game.

But as much as this enforcement of the basic rules of the road implements simulators’ tendency toward the severity of realism, the game also betrays that gravity. Finicky controls, cameras and physics make driving your euro truck difficult, such that even the smallest jostle might send the enormous machine lurching onto the railing, ragdoll style. The game finds the friction point where the gears of realism and fantasy grind into caricature. To play *Euro Truck Simulator 2* is not to play a simulator so much as it is to play the difference between a simulation and game, to toe the line between.

In entertainment games, simulators don’t depict reality so much as the disruption between the realism of commercial simulation and the abstraction of videogames. Three decades after *Flight Simulator*, a simulator is no longer a more detailed or a more realistic or a more professional interactive rendition of a profession. A so-called simulator is neither a simulator nor a game, but the difference between the two.

Creators and players seem to be aware of this strange design space and revel in occupying it. A new genre we might call ‘non-simulators’ has emerged, notable for claiming to be simulators by name while explicitly rejecting the premise of realism and detail in practice. The defining non-sim is *Goat Simulator*, in which players destroy an environment by controlling a goat. And the forthcoming *Rock Simulator 2014* offers players the opportunity to “watch beautiful rocks in any location in the world”.

Both were born as jokes, but a marketplace of earnestly engaged players has nevertheless emerged. Why? We don’t really want to simulate goats and rocks — especially since neither activity is supported by the games anyway. Instead, players wearied by familiarity have embraced this new crop of simulators to experience a wilderness where games haven’t previously dared to settle.

Ian Bogost is an author and game designer. His award-winning A Slow Year is available at www.bit.ly/1eQalad



OVER 200 GAME OF THE YEAR AWARDS



THE LAST OF US REMASTERED



OUT NOW

DAY 1 EDITION INCLUDES EXCLUSIVE SURVIVAL PACK CONTAINING:

- Increased Crafting Speed
- Increased Healing Speed
- 9mm Reload Speed Upgrade
- Rifle Clip Capacity
- Two Skins for Joel and Ellie
- Bonus XP for Multiplayer



NAUGHTY DOG





NATHAN BROWN

Big Picture Mode

Industry issues given the widescreen treatment

When the Steam summer sale ended, I was in profit. I suspect I might be the only person outside of Valve's wheely-desked HQ to be able to say that. I did it by voting every eight hours for which set of four similarly themed games I wanted to see go on sale next; for every three votes, I received a Steam Trading Card, which I promptly listed on the Community Market for a few token pence. Each of them sold within minutes. By the end of the sale, I'd made about a pound and not spent a penny. It says a lot about how Steam has changed, I think, that my only engagement with its legendary summer sale was clicking on something on a website three times a day. I bought nothing, I made nothing, and I got paid. That's the modern Valve business model in a nutshell.

Steam has always been more than a videogame shop, but it feels increasingly like the storefront is merely a hub serving all of Valve's other microbusinesses. These days it's a social network (with its friends list and forums), a fashion retailer (cosmetic items for *Team Fortress 2* and *Dota 2*), a mod repository (Steam Workshop) and a stock market (Steam Trading Cards).

It's also increasingly a place where creators don't go to sell games, but concepts, seeking approval through Greenlight and funding through Early Access. And Valve takes its cut of every penny that flows through its doors. As a case study in platform and business development, it is almost beyond compare. And I've no doubt that Gabe Newell's eyes practically pop out of their sockets whenever he wheels himself over to the finance department. But since each new Steam initiative is devised, developed, integrated and then forgotten about when staff trundle over to wherever they fancy going next, I feel progressively less inclined to engage with the platform.

Much of that, I think, is because Valve doesn't seem to care that much any more either. Greenlight is the perfect example of



I bought nothing, I made
nothing, and I got paid.
That's the modern Valve
business model in a nutshell

the ever-more-blurry line between the company involving its community and simply abdicating responsibility. The first batch of games to be added to Steam after Greenlight's 2012 launch were just ten in number. The following month, there were 21. There were complaints that Valve was too slow in getting greenlit games onto Steam. It said it would fix it; instead, it opened the floodgates. Now, 75 games are added through the process every fortnight.

Between January and May, more new games had been put on Steam than in the entirety of 2013. That has precipitated a drop

in overall quality, and Valve seems to have little interest in maintaining standards. Greenlit city-builder *Towns*, for instance, has been deeply troubled, sold in an undercooked state to an unsuspecting public mere months before Early Access formalised the process of paying to play incomplete games. A rash of public staff departures later, paying players are up in arms that the game they expected may never be completed, and Valve has done nothing. A Steam listing used to be a badge of honour. Now it's a matter of course.

Early Access is even more problematic, I think, and not only for how the prevalence of in-development games made last month's festival of discounts the most uninspiring Steam sale I can remember. A developer's aim is no longer to make a great game that it believes will sell, but to keep the promises made to those to whom it has already been sold, and that bothers me.

I worry that Early Access will become the game industry's equivalent of a payday loan, where studios make more money during development than after launch, so the only way of funding their next project is to do the same again. Above all, I resent the way Early Access games are just thrown in with full releases on Steam – they're on the front page, the carousel, the charts and in sales, with no way of filtering them out.

Yet all these initiatives have been designed with noble intentions. Before Greenlight, Steam was an impossible dream for many developers. Before Early Access, they had to go begging for funding or try Kickstarter. You can see why Valve empowers its community: it makes great mods, designs fancy hats, and both highlights and funds games. This year, it has put up a \$10 million prize fund for Valve's *Dota 2* tournament, *The International*. But it's not the answer to everything. Sooner or later, Valve's going to have to stop the endless coasting along its corridors and solve some of its problems on its own.

Nathan Brown is **Edge's** games editor, and is offering Early Access to next month's column for the low price of £3.99



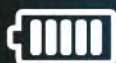
The New PlayStation®Vita



MURASAKI BABY

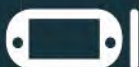
COMING SOON

ENJOY A WORLD OF CRITICALLY ACCLAIMED
DIGITAL GAMES AVAILABLE ON PLAYSTATION®STORE



PLAY LONGER

ENJOY UP TO SIX HOURS OF
GAMEPLAY, OR WATCH UP TO
SEVEN HOURS OF MOVIES.



PLAY LIGHTER

NOW 20%
THINNER AND
15% LIGHTER.



PLAY WITH PS4™

KEEP PLAYING YOUR PS4™
GAMES ON PS VITA WITH
REMOTE PLAY.

™ and "PlayStation" are registered trademarks of Sony Computer Entertainment Inc. Also, "PS VITA" is a trademark of the same company. All rights reserved.
Murasaki Baby™ ©2013 Sony Computer Entertainment Europe. Published by Sony Computer Entertainment Europe. Developed by Overseonico s.r.l.
*Murasaki Baby is a trademark of Sony Computer Entertainment Europe. All rights reserved.



THE GAMES IN OUR SIGHTS THIS MONTH

38 **Everybody's Gone To The Rapture**

PS4

44 **Forza Horizon 2**

Xbox One

48 **Ori And The Blind Forest**

PC, Xbox One

54 **Titan Souls**

PS4, Vita, PC

56 **Mario Maker**

Wii U

58 **Battleborn**

PC, PS4, Xbox One

58 **Escape Dead Island**

360, PC, PS3

58 **Guilty Gear Xrd Sign**

PS3, PS4

58 **Mighty No 9**

360, 3DS, PC, PS3, PS4, Vita, Xbox One, Wii U

58 **Virginia**

PC

59 **Fortnite**

PC

59 **Lara Croft And The Temple Of Osiris**

PC, PS4, Xbox One

59 **Night In The Woods**

PC

59 **The Legend Of Korra**

360, PC, PS3, PS4, Xbox One

59 **The Sims 4**

PC



www.edge-online.com
Up-to-the-minute
previews and reviews

Broadening horizons

The term 'open world' has come to be associated with a very specific type of game. *Grand Theft Auto*, *Watch Dogs* and *Infamous: Second Son* all conform to that narrow definition, offering you a city full of missions and sidequests that's also populated by a smattering of resilient, if not very intelligent, civilians. But choice in these games is often illusory. You might be able to go anywhere, but is there anything to do when you get there?

This month showcases a shift in thinking as developers begin to approach open worlds in radical new ways. The Chinese Room's debut, *Dear Esther*, was perhaps the antithesis of a freeform game, but the small team is tackling the problem of player volition and narrative arcs in nonlinear games head on with *Everybody's Gone To The Rapture* (p38). Its story is made up of many pieces scattered across a large area that can be experienced in any order and investigated in the depth of your choosing. Playground Games' *Forza Horizon 2* (p44), meanwhile, continues the trend of racing games that don't constrain drivers to a circuit and actively encourage shortcut improvisation. And, of course, the celebrated *No Man's Sky* (p62) wants to give you an entire universe to play in, with no particular stipulations as to what you do in it.

Perhaps the real change here, alongside advances in procedural technology, is a growing trust in players' ability to make their own fun, rather than insist on the tasks and challenges we must undertake, and the order in which they can be attempted. In that sense, *Mario Maker* (p56) can be grouped into the same spiritual category, a surprising example of Nintendo handing players extensive authorial control over the platforming gauntlets that popularised its beloved mascot.

There will always be a place for tightly controlled, linear experiences, but as developers learn to build worlds and tools geared towards players' innate curiosity, games can only become richer as a result.

MOST WANTED

Splatoon Wii U

We've shot people, yes, but – outside of some cheat-assisted paintball games of *GoldenEye* – we've never painted them blue. Nintendo's first homegrown attempt at a shooter has the feel of a 21st-century *Mario Kart*: daft fun for the family, but with mechanics in which the best players can find room for expression.

Doom PC, PS4, Xbox One

In an age when nothing is secret, we can only celebrate id shutting off the Quakecon livestream and showing *Doom*'s first trailer only to the loyal fans in the room. News of a return to the series' roots is music to our ears.

Devil's Third Wii U

Nintendo's first-party slate may be all blue skies, but its publishing arm has darker designs. Tomonobu Itagaki's long-awaited return weds cover shooting and *Ninja Gaiden*'s melee. Tonally, it's miles away from the po-faced Ryu Hayabusa, hewing closer to *Binary Domain*-style camp.

H | Y
P | E

EVERYBODY'S GONE TO THE RAPTURE

The Chinese Room is redefining storytelling
and player volition in open-world settings

Publisher	SCE
Developer	The Chinese Room
Format	PS4
Origin	UK
Release	2015

Circumstances have conspired to place us in Shropshire for the apocalypse. To be more specific, we're just outside a fictional village called Yaughton, standing on a country lane a few feet from a red telephone box. It's 1984, and the phone is ringing. We yield to our curiosity and answer it, only to hear a man on the other end garble a message about some kind of event. It's the end of the world and there is nobody else around.

The Chinese Room's previous two games, *Dear Esther* and *Amnesia: A Machine For Pigs*, also sought beauty in desolation, but menaced with their settings – the isolated Hebrides in the case of the former and macabre Victorian London for the latter. *Everybody's Gone To The Rapture*'s rural West Midlands, however, trades the outlandish for the familiar and is immediately more welcoming, a place full of birdsong and sun-dappled trees swaying gently in the breeze. But that very familiarity makes the absence of this region's former inhabitants even more disquieting.

In this poignant loneliness, though, there is one other sign of life aside from the birds circling above: a glowing orb moves gracefully through the air a little way farther along the

road. As we approach, it begins to move more purposefully, like an animal attempting to engage a human in play. "That thing that's dancing around is one of the phenomena in the game," creative director **Dan Pinchbeck** explains. "We have five of these, and they're all unique. They develop a relationship with you as you go through the world."

These AI-controlled presences will haunt areas of interest and, in a roundabout way, guide you, similar to *Sir, You Are Being Hunted*'s will-o'-the-wisp-like lights. "If you follow them, you can find [significant] places," Pinchbeck tells us. "But what's important is that the player won't go, 'If I follow that, I'll get a solution.' It flattens them to a gameplay function. [Instead phenomena are] moving around a space, and when they come to an object, they'll pause. There's an inference of emotion at that object at that point."

A luminescent orb perhaps isn't the most convincing form for a subtle and progressive game mechanic to embody, but Pinchbeck stresses that *Rapture*'s phenomena are works in progress. "We're looking at a moderately early visualisation here that's come on since ►



Corn sways gently as a rule, but reacts violently in the wake of one of the game's floating AI-driven phenomena. While these beings won't specifically guide you, their movements do highlight areas of interest



EVERYBODY'S GONE TO THE RAPTURE



Rapture is ambitious, but isn't meant to appeal to everyone. "We tried to satisfy too wide of a remit [with *Amnesia*]," Pinchbeck says. "As a result, it wasn't a great game for many people, and it was an OK game for others. We probably should have stuck to our guns"



FROM TOP *The Chinese Room's* husband-and-wife team of director and composer Jessica Curry and creative director Dan Pinchbeck

then," he says. "I've been working with Maarten [de Mayer], who is one of our coders, and he's driving the AI forwards. We've been working closely with the effects artists, saying, 'We know there's a functional level of path-finding and splicing, integration and tracking, but the key thing about this is expression.' If [phenomena] express a personality, if they express a sense of being, then we're done. Other functionality is secondary to that; we don't need them to do anything other than make you feel a connection and the sense of being in there."

The game's sense of place is given more weight by abandoning the directed paths of *The Chinese Room's* former games. *Rapture* is an open world, albeit a segmented one. Broken down into several large areas, the game is free to be roamed at your leisure as you try to piece together a nebulous storyline from snippets and clues spread around the play area. As well as physical evidence of former lives — a cigarette smouldering next to an abandoned tool kit; oxygen tanks left in the open boot of a parked car — you'll encounter ghostly echoes of past conversations.

The first one we come across is between a man and a woman, the latter frustrated by the former's revelation that his employers need him to work more hours due to some kind of electromagnetic disruption. It will mean he can't keep a promise to perform magic tricks at his niece's birthday party. The conversation continues as the pair of apparitions wander off in the direction we've come from, but we don't hear the rest because we decide to press on. After *Dear Esther's* controlled delivery, it feels disconcerting to be handed the power to ignore portions of story.

"*Dear Esther* was randomised and not many people realised that," *The Chinese Room* director and composer Jessica Curry points out. "It was a different experience every time. I see Dan's work on [*Rapture*] as an extension of that. But I was deeply concerned that we were going to throw the story under a bus for the sake of trying to do what I saw as a technical exercise. Actually, that was the wrong way round, and thank goodness I was wrong. I simply don't know how he's managed to make something so

complex fit, and you can come at it from so many different angles and it still works on so many different levels and it still makes sense. I was worried about it at that basic level of, 'Actually, will the player be able to piece this story together?'"

"*Esther* proved to us that players are smart, and if you let players be smart then they will be," Pinchbeck says. "If you treat players like they're stupid, then you're not letting them be smart and that's not a good thing. We just treat it like a TV miniseries, in a way. For instance, say we wanted to know Bob's story — he's not a character in the game, he's just an example — he doesn't need to be in the room every time for the player to understand. We can understand more of his story by hearing Joan and Carol talk about Bob, or even by seeing the scratches on Bob's car. Perhaps we hear Joan and Carol talk about when Bob hit the dog, then we see the scratch, then we

"Esther proved players are smart, and if you let players be smart then they will be"

meet Bob later. You can do those three points of story in any order and the jigsaw pieces will fall into place."

It's a progressive view. But creating what Pinchbeck describes as an "artificially enclosed character group" only resulted in a script that felt like heavy-handed exposition. Pulling back from that has not only allowed for greater subtlety in *Rapture's* story, but made room for ambiguity and interpretation.

"What's been interesting when doing playtesting is that people lock on to different characters and really engage with different personalities," Curry says. "Sometimes, it's been really surprising — there are a couple of characters that I find personally dislikable, but somebody who was going through it was fixated on this one character saying, 'I really like them. I really like them. I identified with them.' The whole story then rolls backwards from that interpretation."

"In a way, it's about letting go as a writer. What I love about games, and being a writer in games, is that you can't dictate ►



Musica universalis

For *The Chinese Room*, music is a storytelling tool of equal importance to everything else in the game, and Curry's haunting, reactive soundtrack is tightly bound to both the game's narrative and your journey thorough it. It is an uncommonly symbiotic relationship. "I think the music is a character in our games," Pinchbeck says. "I guess because of the fact that [Jessica and I are] married, and we run the studio together, there's no secondary function; the music and the story are fundamentally intertwined." The relatively short length of *The Chinese Room's* games complements this philosophy. "There's no reason why, in a game of this length, every cue can not be absolutely placed," Curry says. "I know exactly what's going on and there don't have to be any repeats, any looping. It's a joy, but it's hard work — it's a lot of material to generate."



TOP LEFT The tail of this AI entity radiates a complex collection of audio clips, dropped behind it like little mines. "If you are really listening, it starts to unpick and unravel," Pinchbeck says. "The deeper you go in there, the more layers down there you can find." ABOVE "One of the first questions the player asks themselves when they land in a game is, 'Who am I?'" Pinchbeck explains when we comment about the lack of a player character. "If you have an avatar and say, 'This is Faith', you can visualise that you are this person. Everything you show detracts. There's a reason why it's part of the mystery"



TOP RIGHT Triggered audio emanates from objects in the world, such as TV sets and radios in this house. But if you move, it will follow you, hopping to a car radio, or portable in a shed, say. LEFT Interactive objects such as doors aren't immediately highlighted. If you keep the controller still for a few seconds, though, things in your eyeline that can be used will twinkle slightly



EVERYBODY'S GONE TO THE RAPTURE

RIGHT *Rapture* takes place over the course of one day. If you return to areas you've already visited, you'll find some subtle changes in the environment and audio that reflect the decisions you've made and how much of the story you've uncovered



everything – the player will always find a way of getting in the way of that. You've just got to embrace it. If you do that, you start writing with gaps in it, and you create something with holes to leave room for the player to get into those holes without feeling like they're fighting us to create space for themselves within the story."

One of Pinchbeck's great inspirations, he tells us, is Hemmingway's six-word short story. "It's so unbelievably powerful in just six words. You can do an equivalent with environmental storytelling in games, and it's one of the most powerful techniques we've got. Lots of games use it, and in a way we're just taking on that design history in *Rapture*."

But while you can piece together the story in whichever order you want, and delve as deep as you like, the game is not entirely freeform. Key story moments – whose associated locations distort and flare when one of the meandering AI characters passes them – are dotted throughout *Rapture's* world and must be witnessed in order to move the game forward. Though they are essential, The Chinese Room's adherence to a 'show, don't tell' mantra extends to these, too.

"You find these spaces that have these weird visual phenomena in them; it's all part of the central mystery of the story," says Pinchbeck. "In these spaces, what's really important to us is that when these scenes are playing out, you're never just trapped listening to the story and waiting for it to finish, but that there are always visual responses to everything, so it really makes the story continue while the voiceover is going."

We encounter one of these spaces during our time with the game. A farmhouse sits in

a wooded area at the end of a winding muddy footpath. Abandoned washing billows on the line outside, and a creeper plant grows across the front of the building. When we step through the open front door, those visual distortions become apparent, the hallway and rooms warping and flickering intermittently. Framed photos, ornaments and the mess from what looks like a quick exit offer glimpses into the former lives of the people who lived here. And when we move upstairs, we find the epicentre of the disturbance.

Tilting the DualShock allows us to tune into the noise around us, moving through static and snatches of dialogue until we find

"What Rapture is about for us is that it's not a story that can be told in another medium"

the sweet spot and trigger a voiceover. As it plays out, we move back through the house to find it changed and the disturbances gone. A shadow now falls on the wall behind a wheelchair left in the spare room, showing its occupant slumped. Perhaps they're just coughing? Maybe they're in pain? All the drawers and cupboards in the kitchen are now open, their contents scattered across the room. Without the context of other perspectives on the house's occupants, it's difficult to interpret what we're seeing, but it seems that a relationship in which one party was forced to become a carer was under strain. Pinchbeck won't be drawn on plot details, but does reveal that the tuning mechanic will evolve over the course of the game, starting off with simple examples like the one we've

described and becoming more complex arrangements that might require a sequence of movements to trigger, or even play out multiple scenes in the same space.

Choice, then, is a central theme of *Rapture* in much the same way that *Esther* explored free will, testing the boundaries of the definition of a videogame in the process. Pinchbeck compares *Rapture's* approach to narrative to *Pac-Man*: "You're gobbling units of story, but making the choice to do that, rather than it being something that the game is force-feeding you". With its ghosts gently nudging the player in various directions, the analogy seems like a particularly apt one. And drawing a comparison to a classic arcade game only serves to highlight the flood of recognisable videogame mechanics here that were absent in *Esther* (Pinchbeck cites *Halo's* 30 seconds of fun, *Stalker*, *Metro* and RPGs as inspirations, too). But while *Rapture* may bear more familiar game conventions than *Esther*, it is no less experimental than its ancestor.

"What *Rapture* is about for us," Pinchbeck says, "is that it's not a story that can be told in another medium. It's about what you can do in games that's unique in terms of how you deal with storytelling, how the player functions so differently from the idea of a reader. For me, as a player, one of the biggest buzzes I get from games is just being in a world. It can be a little bit frustrating when you're in those open-world environments and you get that very forced embedded linear story. You could go anywhere, but you have to go *here*, then you have to go *here* and do *this*. What if you really can just go anywhere – can you still have a game that has a rewarding dramatic arc to it? That feels like a really interesting, valuable question to be asking." ■



LEFT *Rapture's* plant life is incredibly detailed, and the studio has painstakingly researched the kinds of plants common to Shropshire for the sake of authenticity. BELOW We didn't encounter this train, but its inclusion proves that *Rapture's* bucolic world isn't entirely devoid of modern technology. Well, modern for 1984, at least



Design showcase

Everybody's Gone To The Rapture's Mary Celeste-esque mystery takes place in a world rendered in exquisite detail

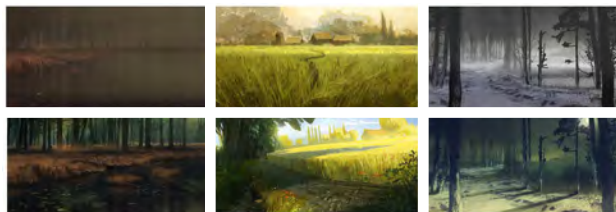
ABOVE This is where you find yourself as the game opens. The lake is covered in rolling mist, and a phone box sits on the road to your right.

RIGHT *Rapture's* world is enticing, blending the epic and intimate in all aspects of its design. It doesn't always feel welcoming, however.

BELOW *Rapture's* varied and bright palette is a world away from *Dear Esther's* dark, moody Hebridean hues. Each area is surprisingly large, too, making for an expansive-feeling and naturalistic world to inhabit



ABOVE Flora will be your constant companion in *Rapture's* unpopulated expanses, the array of life a counterpoint to all the empty streets and houses. BELOW These visualisations of strange phenomena illustrate their graceful, flowing movements as they dance through the air



H | Y
P | E

FORZA HORIZON 2

Playground Games is giving Turn 10's
technology the drive it deserves

Publisher	Microsoft
Developer	Playground Games
Format	Xbox One
Origin	UK
Release	September 30

Would it be cruel to call the first *Forza Horizon* a rush job? In the space of 18 months, Playground Games went from 19 co-founders and a vacant office to a full team and a shipped game that dragged *Forza Motorsport*'s physics model off the track and onto a scale model of Colorado. The first open-world *Forza* was a spectacular achievement, but one with notable omissions in the wake of *Forza 4*. With Playground's fast turnaround, there could be no tuning, no car auctions, no technical HUD, and no Top Gear tie-ins. *Horizon* also put fewer cars on track and in players' garages. But two years later on Xbox One, Playground has the advantage.

After all, *Forza 5* is proof that, yes, calling *Horizon* a rush job would be cruel. Turn 10's launch-day racer was a remarkable piece of technology, but missing two-thirds of *Forza 4*'s tracks, 300 of its cars and countless modes and features. *Forza 5* was a skeleton compared with the fleshed-out *Forza 4*. Worse, it skipped features Turn 10 had never promised but players had been anticipating for years: night racing and dynamic weather.

Turn 10 had all the troubles of working with a new engine on new hardware, but Playground is arriving a year later with its open-world sequel having enjoyed all the luxuries of working with newer APIs on more mature Xbox One hardware and with Turn

10's new engine. *Horizon 2* matches *Forza 5*'s vehicle count with 200 cars, strips out that game's controversial microtransactions, ups the radio stations from three to eight, includes a full tuning system, and adds a day/night cycle and weather. But to frame this as a contest would be to miss the point; certainly there's a degree of competition between Playground and Turn 10, but everyone wins.


"We now have two world-class teams working on the same technology and the same codebase, sharing ideas and pooling creativity," Playground's creative director **Ralph Fulton** says. "I think that lets us push harder and further than we ever could alone."

Armed with Turn 10's new engine, Playground is responsible for reworking the code to fit an open-world game, which comes at a cost: the framerate has fallen from 60fps to 30fps, and the number of player-controlled cars on the road is down from 16 to 12. The payoff is giddy space and surpassing beauty. Spanning the beautiful south of France and northern Italy, *Horizon 2* takes in the sights and spectacles of Provence, the Côte d'Azur, Tuscany and the rolling foothills and majestic mountains of the Alps, where the *Horizon* festival has set up shop for 2014.

"Setting your game in one of the world's most beautiful places is a good start for ►



Ralph Fulton,
creative director,
Playground Games



While Turn 10 boasted about the sheer number of triangles composing each of *Forza Motorsport 5*'s cars, Playground is taking *Horizon 2* out of the geometry arms race with a focus on dynamic lighting



FORZA HORIZON 2



Lamborghinis take centre stage in *Forza Horizon 2*'s campaign, with the new 2014 Huracán making its videogame debut on the front cover and as the game's showpiece car

next-gen beauty," Fulton says. "But it's not about polygon counts or texture resolution any more. It's just about light. It's about how light moves through the atmosphere and glints off the bodywork of a supercar, and the way the world reflects back at you from a puddle on a wet cobbled street."

Playground has simulated the physics of light as carefully as Turn 10 simulates the physics of cars. *Horizon 2*'s world is lit not by an abstract light source but by a working sun shining through a working atmosphere. Light changes as the particulates in the atmosphere shift. You'll see rainbows in *Forza Horizon 2* not because an artist drew a picture of a rainbow, but because that's how light works.

"We don't have to fake anything," Fulton says. "The sky is blue in our game because physics dictates it. We realistically simulate the way puddles form and evaporate when the sun comes out not just because we can, but

"It's not about polygon counts or texture resolution any more. It's just about light"

because it gives us a powerful, robust system that works everywhere and at any time. Every surface you see is a physically modelled material. We model absorptency into our materials too, so we know mathematically how water affects every surface."

The knock-on effects are chaotic and huge. For Playground's artists, every car needed working windscreen wipers for the cockpit camera; for its designers, events would have to work at any time and in any weather. For you, however, it means the entire world is unpredictably dynamic. "As a designer, driving into a downpour, windscreen wipers on, cars spraying your windshield, is an experience I've waited for in *Forza* for years," Fulton says.

The perpetual 'What now?' questions surrounding a *FIFA* or a *Madden* often drive developers to create features no player ever wanted in the hunt for headline additions. *Horizon 2* seems dedicated to addressing with smart design the more worthwhile questions that surround such gigantic series. What, for example, is the point of *Forza 4*'s 500 cars or

Horizon 2's 200 when most players will never try out more than a small handful? Yes, a huge car list enables an even broader audience to drive their personal dream car, but *Horizon 2* is dedicated to giving players a reason to try something different.

"We have everything from classic muscle cars to Group B rally cars to extreme off-roaders to hot hatches," Fulton says. "But we want players to explore that list the way they'd explore the world, so we've made gameplay available for whichever car you choose." Picking up where the first game's 1,000 Club left off, The Bucket List will see cars parked all over the open world, which players can jump into for an instant challenge – a perfect hill climb in the Alps in a Zonda, maybe, or a fence-smashing rampage through a French vineyard in a Lancer.

And all of it is based on the foundation Turn 10 spent so much time building for *Forza 5*. That investment in new tech meant abandoning most of the *Forza* tracks and cars recycled and rebuilt over the course of *Forza 2*, 3 and 4, but it gives future *Motorsport* games and *Horizon 2* a powerful and flexible technology base. Every material is physically modelled, online play is powered by dedicated servers, and the AI is founded on the cloud-based – and abominably named – Drivatar system that was introduced in *Forza 5*. "AI is an area of racing games that has stagnated for a decade," Fulton says. "I believe from now on all racing games will be judged by how close they come to our Drivatar benchmark. For me, it elevates something that's become a little bit mundane into something that is personal and translates into real-world conversations with friends about what you did together while they weren't even playing."

With technology traded and expertise shared between Turn 10 and Playground Games, *Horizon 2* patches the first *Horizon*'s holes and looks set to make up for *Forza 5*'s obvious omissions. Perhaps more importantly, it's an investment in the future; with *Horizon 2*'s British team feeding its innovations to Microsoft's Seattle racing studio, *Forza Motorsport* is in a powerful position as the war on Sony's *Gran Turismo* series gets ready to move into its tenth year. ■



Carnival spirit

"Festival culture is inherently social and Xbox One is inherently social, so your world is constantly connected to others' in lots of clear ways," Fulton says. "If you open up the world map, you'll see exactly where your friends are in the world, and you'll have the option to join them instantly with a button press. As you drive around the world, it'll constantly compare how you're doing to how your friends are doing. And Drivatars are a constant reminder of your friends, the liveries they love and the places they go. When you go into the online game, we make that transition instant... All you do is press a button while you're driving and we'll instantly matchmake you into an online session with the right traffic, the right weather, and the right time of day."



TOP LEFT Pagani's Huayra benefits from the absence of any Top Gear licensing in the *Horizon* half of the *Forza* franchise, sparing us Jeremy Clarkson's wheezing honk. TOP RIGHT Cross-country events pick up where the first *Horizon's* Rally DLC left off, allowing even the sportiest of cars to go off-road in the name of fun. LEFT These rain-drenched screens bring to mind those shots taken from *Project Gotham 4* back in 2007. Weather has been a long time coming to *Forza*



FAR LEFT Car Meets enable *Forza* players to group up before racing together, sharing liveries and tuning setups in an open-world interactive lobby of sorts. LEFT *Horizon 2* takes in a part of the world that car enthusiasts agree has some of the best driving roads imaginable, with miles of twisting paths and spectacular vistas around seemingly every corner

H | Y
P | E

ORI AND THE BLIND FOREST

At E3 it enraptured audiences with its art,
but gameplay comes first for Moon Studios

Publisher	Microsoft
Developer	Moon Studios
Format	PC, Xbox One
Origin	Various
Release	Autumn

Don't call *Ori* arty. "I thought people would see *Ori* and think, 'Yeah, this is another arty game,'" game director **Thomas Mahler** says. "I think there's a lot of indie developers right now who see a market for these emotional games. I think that's a problem, because a lot of times, in terms of gameplay, they don't have much value. We care deeply about design. We're really rough on ourselves, and that's hard to convey in a trailer. I want people to understand we're building something for the gamers out there."

Ori's trailer hushed the crowd in between explosions at Microsoft's E3 conference, the footage depicting a small slice of the game's opening as little forest sprite *Ori* is exiled from his home and adopted by the bear-like *Naru*. "She becomes like a mother and raises him," Mahler says. "We wanted to tell a lot of story in a very short time; we were inspired by Pixar's *Up*, and how they told the story of a whole life in just a few minutes."

Mahler watched as attendees absorbed the final scenes — wherein *Ori* offers food to a lifeless *Naru* — in silence. "It was very emotional for me: sitting there after four years," he says. "I'd always knew I'd love to see my game up there, but it was scary because everybody went silent. Later, I was just scared people would think it's another one of those arty games that's trying to make them cry, and

undervaluing the amount of effort we've put in. For me, it's great that people got emotional about the story we've written, but the core of the game has to be there and has to be great before you go in with the story."

Mahler worked in sculpture and fell into games by accident, producing 3D models and eventually working on *StarCraft II* at Blizzard. His partner at Moon Studios is engineer **Gennadiy Korol**, who worked on overhauling *Ori's* Unity engine base to bring the game's lavish 2D world to life. For years, the game was a side project to Moon's *Warsoup*, which was pitched to Riot and Microsoft, although both passed. Then an early demo of *Sign*, as *Ori* was called, was demoed to Microsoft and met with enthusiasm. Four years later, it appeared on the publisher's E3 stage.

"I think at the heart of a game you have to think about how it will be played and why it's fun," Mahler says. "And [ask] 'Can we take it to the next level?' If you can do that within a couple of weeks, then you probably have something really strong. So I was OK with showing Microsoft something rough, because when you held the controller, it felt awesome."

Ori today is a Metroidvania game — neither Mahler nor Korol runs from the label — with a tightness of control and a complexity of challenge. "We looked at games like *Super* ►



FROM TOP Engineer
Gennadiy Korol; Moon
Studios game director
Thomas Mahler



The bear-like Naru becomes a guiding figure in Ori's life when he is expelled from the forest where he was born. With themes concerning nature and coming of age, *Ori's* Ghibli influence is clear



ORI AND THE BLIND FOREST



Ori's lighting effects and reactive flora are all handled by Xbox One's GPU thanks to some innovative problem-solving by Moon's chief engineer. Unity is the game's foundation but everything that makes Ori look like Ori is homegrown at Moon

Metroid and *Castlevania: Symphony Of The Night* and we studied them all. As a designer, I think it's your duty to look at what's out there, and so the question came up: 'What are we doing to push it forward? What can we do with a *Metroidvania*?' One of the most immediate, natural things was platforming. We all love *Castlevania* and *Super Metroid*, but the platforming is definitely something that could be improved. Why can't those games also be great platformers that are just as good as a *Mario* game?"

Ori's platforming gets difficult quickly — in the first 20 minutes, players are asked to push a block uphill past tricky whirling spikes to climb a high platform — so Moon allows players to save anywhere at the cost of energy. The catch is that your finite energy also governs Ori's attacks. Without energy, Ori can only evade and run, with all your progress from the most recent save point on the line.

"Do I spend my energy on abilities such as blasting enemies away, or on saving?"

"Death should feel punishing," Mahler says. "So I have to make choices — do I spend my energy on abilities such as blasting enemies away, or on saving? Energy is only available at certain locations, so players will have to make choices. You're really constrained by how many times you can save and fight. And that means when you find another energy cell, that's huge for the player."

As you explore, the environment broadens out and reveals itself at a measured pace. First, Ori unlocks the ability to attack — "you don't actually have to aim at enemies, because the game's mostly focused on pixel-perfect platforming," says Mahler — then a double-jump, opening paths to new areas.

These areas promise to be as gorgeous as those shown in the trailer. "People say, 'It's a 2D game, so why do you even mention 60fps and 1080p?'" Korol says. "But I'm not sure those people have ever developed a 2D game that has quite so much art in it. The [number] of uniquely painted assets, the [number] of shaders, lighting effects, animations, and all

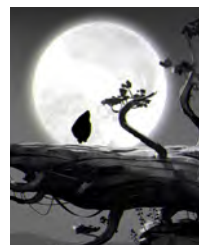
of it with no loading. We have a lot of layers of parallaxing... It took around a year to get what you see functional, and then two additional years to make it run properly.

"We want the environment to feel like a painting come to life and we want it to react to you as you play. But since you have so much painted content and so many variations of so many plants, how do you animate them with such a small team? So we built a shader framework that lets us do all those things — plants lighting up, reacting to you, bending in the wind — all on the GPU, which means we can have the whole environment animated to make it feel like a place and not just a static painting."

"We had this idea that artists should just have complete freedom," Mahler says. "They should just be able to paint and put things in and not be concerned about how many objects we have in a scene. A lot of our set dressers never worked with 3D before... It's like, 'Yep, doesn't matter. Just paint your thing in Photoshop and drop it into the game.'"

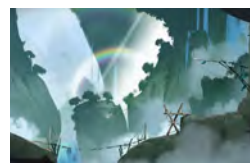
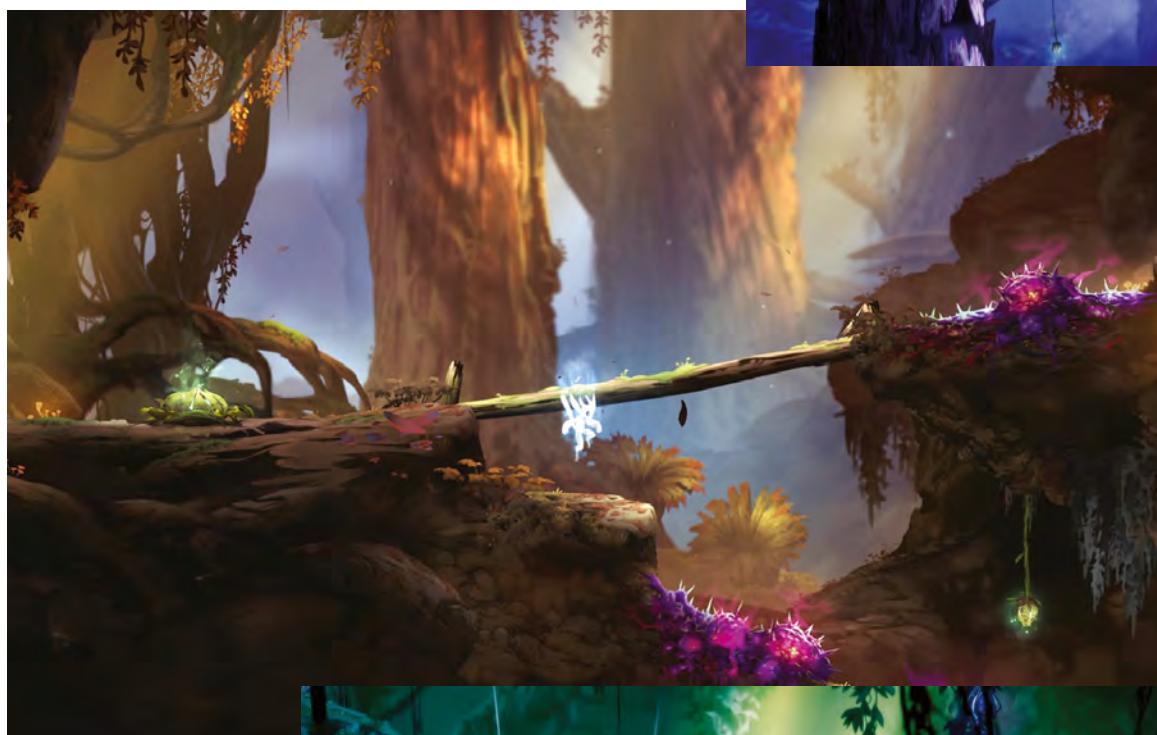
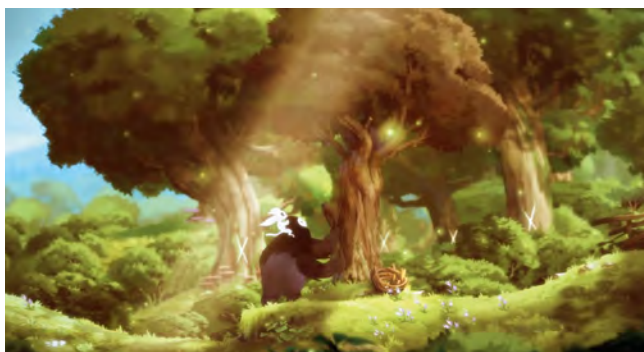
Ori's forest world is beautiful in motion — hundreds of light sources react to Ori's movements and every area has a depth that belies its painted 2D components — but it's built to tell a story. "We took a lot of inspiration from Ghibli," Mahler says. "I think that's obvious and everyone can see it. A lot of it's inspired by films like *The Lion King* and *The Iron Giant*. That's the kind of feeling I wanted to get into a game. The first time someone sees Mufasa's death or how the Giant grew, that made them feel something."

Yet, crucially, it's a story being told on many levels. "A *Metroidvania* is like a coming-of-age story in itself. You grow and learn, and in the game the character grows, so in a way the story fits the mechanics," Mahler says. "It's hard to make people feel something for the *Gears Of War* characters. They're human, and you're always fighting the uncanny valley. I think it's much easier if you deal with allegory, where you have simple characters in a human story. When people finish *Ori*, I want them to be breathless. The best films... when you finish watching them, you think, 'Oh my God, that was amazing.' We want to give people that feeling in a real game." ■



Moonrise

Korol and Mahler founded Moon Studios in Israel and Austria after meeting on an artists' forum and developing their own tools together. Today, the studio employs nine people spread across the world, with staff in Australia, Denmark, Canada, the US and the UK, as well as temporary contractors who work from home as required. Together, they work with a shared responsibility for the game's quality, which Mahler hopes is evident. "Really, you have to be honest with yourself," he says. "If something sucks, we say it. If something doesn't work, we'll change it again and again and again until [other people on the team] start hating you for it. But when you play the current build and the build from two weeks ago, it's like, 'I'm so glad we made these changes.'"



TOP LEFT The game's opening stages race through Ori's life with Naru and set the stage for the adventure ahead.
 ABOVE *Ori* uses the old *Super Metroid* trick of theming each new area's colour palette to help players build a mental map of the complex spaces they will explore.
 RIGHT The wall jump is the second of Ori's unlockable abilities, discovered within the game's first 15 minutes



TOP RIGHT The glowing sphere behind Ori's right ear is his guide and weapon, attacking any nearby threats with the tap of a button.
 ABOVE CENTRE Countless layers of parallax give the world a depth unmatched by similar 2D platformers.
 ABOVE The dark owl Kuro's arrival in the forest is the catalyst that turns Ori's home into a darker place

PS4 and PlayStation are registered trademarks of Sony Computer Entertainment Inc. Also, "PS4" is a trademark of the same company. DRIVECLUB™ ©2013 Sony Computer Entertainment Europe. Published by Sony Computer Entertainment Europe. Developed by Evolution Studios. "DRIVE CLUB" is a trademark or a registered trademark of Sony Computer Entertainment Europe. "DRIVECLUB logo" is a trademark of Sony Computer Entertainment Europe. All rights reserved.



TM

DRIVECLUB™

DRIVE TOGETHER, WIN TOGETHER

IT'S NOT JUST ABOUT WINNING OR LOSING. IT'S ABOUT TEAMWORK. IT'S ABOUT JOINING A CLUB AND SHARING IN THE SHEER THRILL OF EVERY RACE. WITH HUNDREDS OF EVENTS AND UNIQUE IN-RACE CHALLENGES APPEARING AT EVERY TURN, THERE'S ALWAYS SOMETHING TO PLAY FOR IN DRIVECLUB.

OCTOBER 10TH



**"THE BEST LOOKING
NEXT-GEN RACER BY A MILE"**
videogamer.com

"PS4'S FORZA KILLER"
VG24/7



PRE-ORDER NOW TO RECEIVE:

SPECIAL RUF RT12 R PACK:

GET INSTANT ACCESS TO THE HIGH
PERFORMANCE RUF RT12 R
SUPERCAR WITH EXCLUSIVE LIVERY
AND A BOOST OF IN-GAME FAME.



Publisher

Devolver Digital

Developer

Acid Nerve

Format PC, PS4, Vita

Origin Various

Release Q1 2015



TITAN SOULS

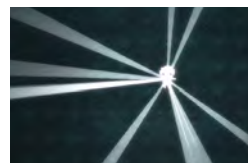
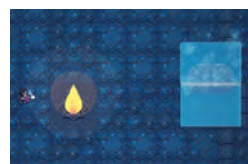
The little game having a big shot at redefining the boss battle

The best boss fights, says Acid Nerve's **Mark Foster**, are the ones where you barely survive. "When you're on one heart in *Zelda*, say. Link is flashing. Noises are going off in the background. When you know you're about to die and somehow you just about manage to [land] that final hit... That kind of tension, that really fine line between life and death, really pumps you full of adrenaline. It's such a good feeling when you actually pull off the kill."

Titan Souls is that moment over and over again. You're only ever a single hit away from death, and while you're equipped with a run button and a brisk roll that allows you to dodge the attacks of the game's guardians – often squeaking through by mere pixels – you will die repeatedly. Yet your opponents suffer from a similar condition: while you'll have to expose the weak spot on some, and

cajole others into leaving their Achilles' heels unprotected, a single well-aimed arrow is enough to slay them. The game's power comes from this single-minded approach. It feels confident, focused and, on a moment-to-moment basis, stomach-knottingly tense.

Titan Souls began life as a demake of *Shadow Of The Colossus*, written in Flash for the 48-hour Ludum Dare jam. Foster had been working on a personal project, an exploration-based puzzle game called *Chroma*, in his spare time for two years, and needed a break – seeking out a chance to enjoy the almost instant gratification of completing a game within three days. With musician and sound director David Fenn on board, the pair wrote down one idea for each of the 20 possible themes outlined ahead of the jam. The final theme – You Only Get One –



ABOVE CENTRE This frozen guardian highlights the exceptional audio design, capturing the weight of a huge chunk of ice as it slides across – and pounds against – the granite surfaces.

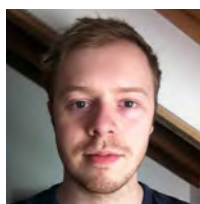
ABOVE As soon as you deliver the killing blow, the screen greys out, before rumbling violently as the protagonist seemingly absorbs the life force of the defeated boss, reflecting beams of light and turning the screen a brilliant white.

LEFT You can climb those tangled vines, although in the demo there's no real advantage to doing so





The game's responsive dodge-roll is where it most resembles *Dark Souls*. Holding the same button allows you to run, although the increase in speed from walking pace is negligible



Mark Foster (pictured) teamed up with David Fenn and Andrew Gleeson to make the first incarnation of *Titan Souls* for Ludum Dare

turned out to be a stroke of good fortune. "I think we were really lucky with You Only Get One, because the actual core of the game, that single arrow and [having] one hit point, is what makes *Titan Souls* really fun. That's a weird nugget of game design that we probably wouldn't have [discovered] unless we'd had that as a theme, so that was really cool."

Australian artist Andrew Gleeson joined the team, having spoken to Foster and Fenn via Twitter, and the three worked 14 hours a day over three days to finish it. Foster was satisfied with the results, but had no idea it was going to be so well received. "I wasn't thinking about anything other than finishing it. There were three bosses in it and I made all of those on the last day as well, so I was under quite a lot of pressure just to get it done." But press coverage was glowing, and soon after *Hotline Miami/Luftrausers* publisher Devolver Digital tweeted Foster to ask whether he'd be interested in turning the prototype into a full game. Not one to look a gift horse in the mouth, Foster accepted the offer quickly. "It seemed like an opportunity not to be missed," he says.

About five months of work went into the playable section that was showcased at E3. Written in C rather than Flash, it's a much more fluid experience, discarding the original's rigid four-way movement, but retaining its core strengths. Four bosses make up this slice of the game. The first is a bouncing, gelatinous blob that splits into two when hit. The trick is to target only the one containing the heart, but with slime trails

There's plenty of character in *Titan Souls*' pixel-art aesthetic. The first boss's exposed heart is particularly repulsive. That's partly down to the bloody trails it leaves, but also the wet slap you hear as it bounces after you



slowing your avatar down, the cramped arena feels even more claustrophobic, and each miss produces multiple smaller, faster blobs. It's an education in the importance of lining up your shots, although even this process has a note of exquisite tension, since committing to a shot sees your archer plant his feet, instantly making him more vulnerable.

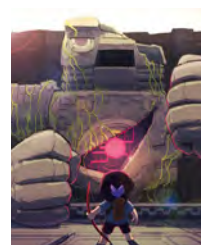
The same applies to the need to retrieve your lone arrow: you can simply collect it from where it lands, or summon it towards you using telekinesis, although this also prevents movement. All of this makes for a particularly triumphant conclusion to the battle, when the arrow delivers the fatal blow on its way back to us. We pause, and briefly wonder whether any Star Wars game has ever made us feel more like a Jedi.

Other bosses require dozens of attempts before they're finally dispatched. A brain

"The core of the game, a single arrow and one hit point, is what makes it really fun"

encased in a large block of ice slides across a slate floor, passing over pressure plates that trigger a flame in the room's centre. There's a monolith with a laser-firing eye, and a stone head with fists that float, then pound — inspired, perhaps, by *The Wind Waker*'s Gohdan. Indeed, Foster likens the finished game's nonlinearity to the original *Legend Of Zelda*. "You can go off in any direction; you don't have to kill any bosses in a particular order. You can just wander around exploring and finding fights to win."

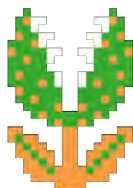
There will be 20 in the finished game, and Foster says that Acid Nerve's biggest challenge is making each one different from the previous enemy without overcomplicating things. He's particularly keen to avoid the traps that videogame bosses usually fall into, where players have to repeat the same patterns to win. "In this game, you know what to do and you only have to do it once, but it makes it really difficult to do it. Keeping that is the core of the game, and hopefully it'll remain true to itself." ■



PS Plus

Although it was demoed on PC at E3, Foster is particularly pleased that the game will be coming to PS4 and Vita, suggesting they're "the perfect home" for *Titan Souls*. "Sony is really embracing [indie] games, and why not? You're getting more games on your system, and that's never a bad thing." He also praises his publisher for finding a slot for the game during Sony's E3 press conference: "It was a pretty huge deal, having our game in front of so many people." Yet rather than feeling pressure, Acid Nerve is relishing the attention. "All these people writing about it is a reminder that we're on the right track, and that we've got work to do. That's a big motivator to carry on."

Publisher/developer
Nintendo
Format Wii U
Origin Japan
Release 2015



MARIO MAKER

Twenty-two years after Mario Paint, Nintendo reopens the toolbox

Mario Maker's legacy, even if it achieves nothing else, will be its exposure of just how precariously Mario levels hang together. A platform placed just a block's width out of whack or a single enemy not synchronised with other nearby troublemakers can play havoc with a level's flow and leave players feeling cheated. After toying with our own constructions for a while, we certainly have newfound respect for Nintendo's level designers.

While it may be tough to match Miyamoto and co's genius without practice, *Mario Maker* at least makes it easy to start building your own worlds. It's helped along by Wii U's GamePad, which might be struggling to justify its existence elsewhere, but proves an ideal tool here. A simple interface lines up the various block types, items and enemies at your disposal across the top of the screen. Once one's selected, you can tap to place it or drag it onto the editing grid.

Some blocks are fixed to one size, while others, including earth and green pipes, can be stretched to your desired dimensions. Pleasingly, the chime that accompanies every placement stays in tune with the background music, making the act of simply placing blocks a pleasure. If you do get caught up in the melody and place too much, there's an eraser (you can also double tap an item to delete it), an undo button and even a screen-clearing rocket, should you need it.

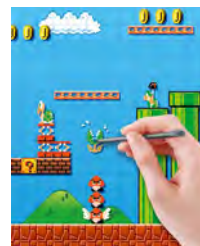
Most of the available brushes can be edited, so the direction in which an elevator moves, for example, can be changed by tapping on it, while green Koopas turn red if shaken. Mario can also be moved around and placed where you want, and shaking him will cause him to grow as if he'd just ingested a Super Mushroom. You can add wings to any enemy – including Piranha Plants – and they'll automatically trace a characteristic flight path through the level when you play it. Place wings on their own, however, and they'll cheerily flap off the top of the screen.

Switching between the editor and Play mode is instant, so you can quickly playtest your fiendish assault course (*Mario Maker* was originally developed as an in-house tool for design teams, after all). But switching back to the editor after running through a course reveals *Mario Maker*'s best feature: a timeline of your route is drawn across the level in a string of transparent Marios, helping you nudge ambitiously placed platforms and power-ups to within reach.

Your quality-assured efforts can be rendered in classic *Super Mario Bros* or *New Super Mario Bros* skins – again, with instant switching. Hopefully, Nintendo will eventually introduce other styles – *Paper Mario* and *Yoshi's Island* modes would certainly get our attention. Producer Takashi Tezuka has said that he wants to include non-Mario graphical approaches, too, though he's been careful to stress that nothing has been finalised yet.

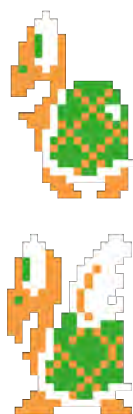
Other components in the planning stage include composing your own music, and level sharing. Nintendo is remaining secretive on the latter, however, refusing to confirm any details on exactly how it will work yet. Tezuka has, however, stated that "sharing with friends is really the whole point of making levels", but the game's success will rely on this being as simple as designing a level in the first place – having to enter a 12-digit code, for instance, or being limited to only those in your friend list risks undermining *Mario Maker*'s sizeable appeal.

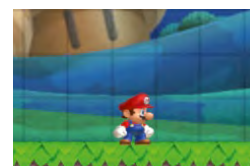
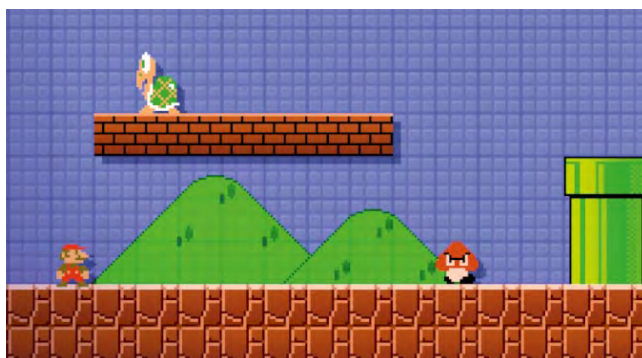
Even so, at this early stage Nintendo has extracted a surprising amount of mileage from the simple act of mucking around with a limited toolset. Mario's inherent charm undoubtedly props up this toy's appeal, but if Nintendo can make *Mario Maker* as social as the flagship Mario games – with level sharing, leaderboards and perhaps even downloadable replays – this tool should give GamePads some long-overdue workouts. ■



Little big plumber

Though it's still in early form, *Mario Maker* is extremely polished. It's no dry editor, either: everything you try elicits a response, whether it's shaking characters to change them into something else or wings flying away if not tethered to an enemy. If you try to place a Koopa in the ground, they'll disappear in a puff of smoke, and if you leave Mario in midair near a platform, the game will temporarily extend that surface to ensure he doesn't fall when you start to play. There's a sense that Nintendo has built a playpen with the softest of walls, allowing you to hurl yourself at them without reservation.





TOP There's a pleasing combination of familiarity and surprise when you create something that looks like a real *Mario* level.

RIGHT You're given plenty of space to build convoluted, levels. If you're sadistic enough, you can even stack Piranha Plants to make a nightmarish obstacle course

TOP This is one of the three example levels built into *Mario Maker*, all of which offer a surprisingly tough challenge. More importantly, they provide a reminder that you needn't be restrained with your own builds.

ABOVE Switching between classic and *New Super Mario Bros* graphics is enjoyable in and of itself, your designs instantly transposed to whichever style you pick.

MAIN This stream of Marios appears after you've tested a level and shows the route you took through it. It's a wonderfully simple solution to a slew of potentially fussy positioning problems





ROUNDUP

BATTLEBORN

Publisher 2K Games **Developer** Gearbox Software **Format** PC, PS4, Xbox One **Origin** US **Release** TBC



After successfully building MMOG mechanics around the FPS with *Borderlands*, Gearbox's next genre mashup will seek to repeat the trick by once again magpie-ing from the latest oversubscribed flavour of the month. Gearbox president Randy Pitchford may not want us to call it a MOBA, but *Battleborn*'s 5v5 setup, its cast of heroes and its hordes of AI creeps mean comparisons are inescapable. A fiveplayer co-op campaign will go some way towards remedying that, but it's hard to get too excited about yet another big company hitching itself to the *LOL/Dota* bandwagon. And, post-*Colonial Marines*, Gearbox's stock has rather fallen.

ESCAPE DEAD ISLAND

Publisher Deep Silver **Developer** Fatshark **Format** 360, PC, PS3 **Origin** Sweden **Release** Autumn



Like its shuffling, decayed antagonists, *Dead Island* just won't die. We're cautiously optimistic that Yager can improve the fortunes of a series with a current average *Edge* score of 3, but the same can't be said for this thirdperson action game from *War Of The Vikings* developer Fatshark. Seemingly borrowing from the likes of *MadWorld* and *Dead Rising*, this "survival mystery" will tell the origin of Banoi's zombie outbreak; we'd be much more interested in the end of it.

MIGHTY NO 9

Publisher Concept **Developer** In-house **Format** 360, 3DS, PC, PS3, PS4, Vita, Xbox One, Wii U **Origin** Japan **Release** April



It seems \$3.8 million only goes so far in the making of this spiritual successor to *Mega Man*. Concept has embarked on a second round of crowdfunding, seeking \$100,000 for English voice acting. Keiji Inafune insists development is on track, but we're still nervous: we played *Yaiba: Ninja Gaiden Z*, after all.

GUILTY GEAR XRD SIGN

Publisher Arc System Works **Developer** In-house **Format** PS3, PS4 **Origin** Japan **Release** Q4



The only thing stopping *Guilty Gear Xrd* from being the most beautiful 2D fighter of all time is the fact that it isn't 2D at all. The fifth game in the series looks and feels like classic *Guilty Gear*, until the camera unhooks and twirls around a fully 3D character model in real time. Stunning stuff.

VIRGINIA

Publisher/developer Variable State **Format** PC **Origin** UK **Release** 2015



UK studio Variable State's debut game is an "interactive drama" that casts you as a newly graduated FBI agent on the hunt for a missing person. Influences include *The X-Files*, *The Outer Limits* and *Twin Peaks*; that the only released screenshot is set in a small-town diner says much of the game's intentions.

LARA CROFT AND THE TEMPLE OF OSIRIS

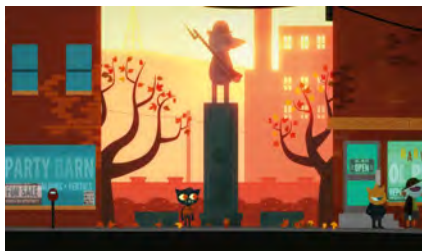
Publisher Square Enix **Developer** Crystal Dynamics
Format PC, PS4, Xbox One **Origin** US **Release** TBC



The second of Crystal Dynamics co-op adventures draws a clear line between the Saturday morning cartoon Lara Croft of *Guardians Of Light* and the R-rated mega-budget version. *The Temple Of Osiris* sees Croft conversing with Egyptian gods and solving co-op puzzles with her three adventurer buddies.

NIGHT IN THE WOODS

Publisher Finji Games **Developer** Alec Holowka, Scott Benson, Bethany Hockenberry **Format** PC **Origin** US **Release** 2015



Night In The Woods is an adventure game in which Mae, an anthropomorphic cat, returns to her dead-end home town of Possum Springs after dropping out of college. It's a coming-of-age tale, sure, but it's also about death, depression, loss, clawing up telegraph poles and skipping across rooftops.

THE SIMS 4

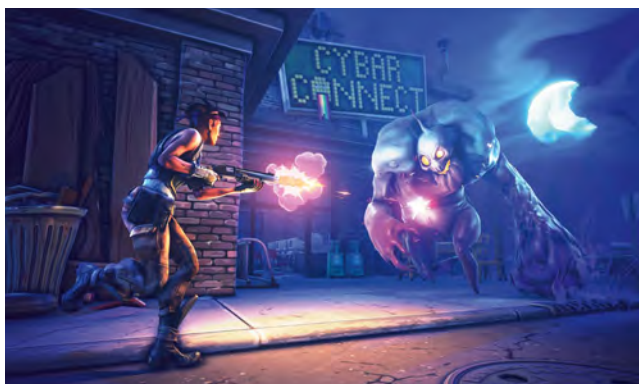
Publisher EA **Developer** Maxis **Format** PC
Origin US **Release** September 4



While EA and Maxis would prefer you to focus on *The Sims 4*'s new features – improved AI, overhauled animation and multitasking – players are instead bemoaning what's been left out, such as toddlers and swimming pools. It may have fixed *SimCity*, but the damage to Maxis's reputation endures.

FORTNITE

Publisher/developer Epic Games **Format** PC **Origin** US **Release** 2015



"Yes, it still exists," says a rather defensive Epic PR update on *Fortnite*, the game it announced in December 2011 and promptly shut up about. Playable at last, *Fortnite* is part *Minecraft*, part Horde Mode, a co-op game in which you scour the world for building supplies and then defend the resulting construction from an enemy onslaught. It's PC-only for now, but Epic's praise for the attitude of Sony and Microsoft towards free-to-play suggests that will change soon.

THE LEGEND OF KORRA

Publisher Activision **Developer** Platinum Games **Format** 360, PC, PS3, PS4, Xbox One **Origin** Japan **Release** Autumn



In addition to putting the finishing touches to *Bayonetta 2* and making Hideki Kamiya's *Scalebound*, Platinum is also hard at work on this adaptation of Nickelodeon's action-packed sequel to *Avatar: The Last Airbender*. The cel-shaded visuals are faithful to the source material, and so is the story, penned by one of the show's lead writers and bridging the gap between seasons two and three. Combat involves manipulating the four elements, although, this being a Platinum Games title, there's a counter mechanic as well. Hats off to Activision, too, for putting a licensed game in the hands of studio with such a strong track record.

Specialist magazine of the year

Digital Magazine Awards 2013



Try two free issues of our iPad edition
today – search “**Edge**” in the App Store



You will receive two free issues (the current issue and the next issue) when you start a no-obligation trial subscription. Available to new subscribers only.
iPad is a trademark of Apple Inc., registered in the US and other countries.
App Store is a service mark of Apple Inc.



#270



Explore the iPad edition
of Edge for extra
feature content

VIDEOGAME CULTURE, DEVELOPMENT, PEOPLE AND TECHNOLOGY



86



94



82



98



74



62

62 **Maths Effect**

74 **Game Changers**

82 **An Audience With...
Martin Kenwright**

86 **New Horizons**

94 **The Making Of...
Yakuza**

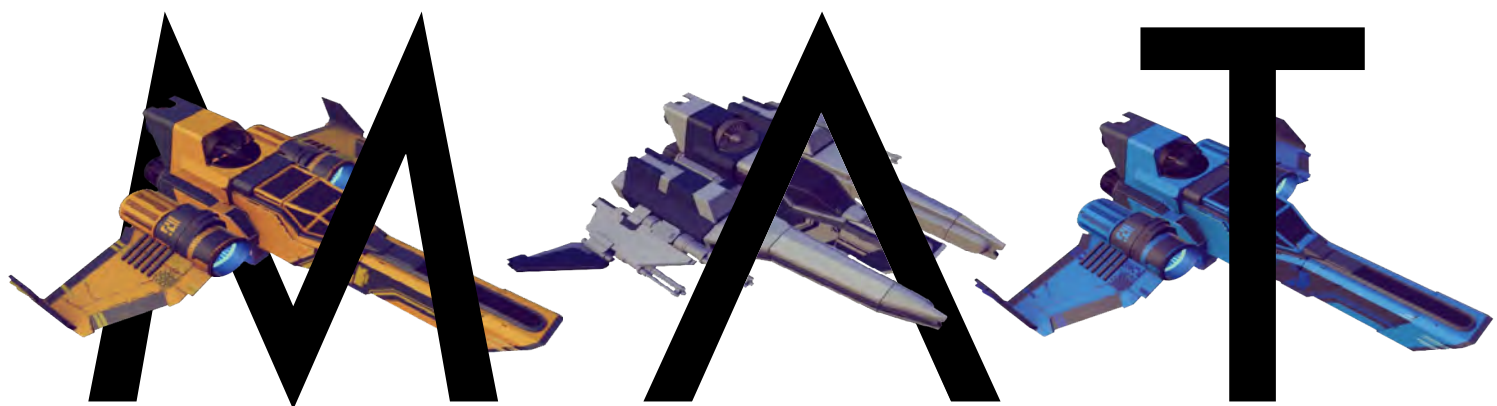
98 **Studio Profile:
RedLynx**

118 **Time Extend:
Osu! Tatakae!
Ouendan**

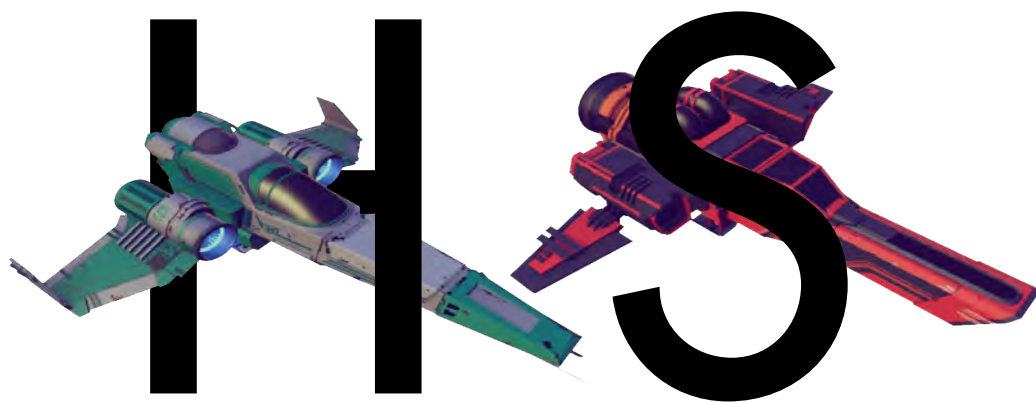
EDGE



118

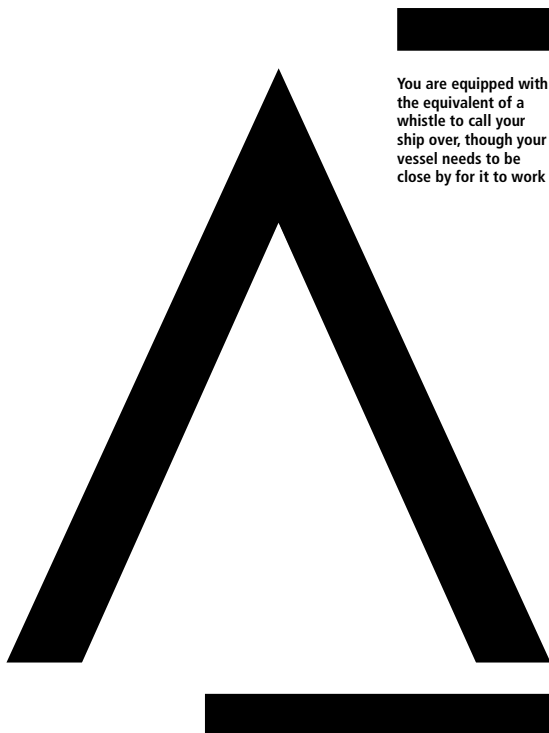


Game *No Man's Sky*
Format PC, PS4, TBC
Publisher/developer
Hello Games
Release TBC



How Hello Games is building an infinite universe on
procedural foundations for the astonishing *No Man's Sky*

By CHRIS SCHILLING



You are equipped with the equivalent of a whistle to call your ship over, though your vessel needs to be close by for it to work



FROM TOP Hello Games managing director Sean Murray; creative director David Ream

s we take our first steps on the surface of Oria V, out of the corner of our eye we catch Hello Games' **Sean Murray** fidgeting anxiously. We ignore him and focus back on the screen. Fireflies are floating lazily in the air, the only signs of life in the cave we're exploring as we weave our way – needlessly, it turns out; the collision is switched off – between clusters of stalagmites. We fire up our scanner with a jab of Square, emitting a loud signal that fizzles outwards, highlighting any nearby resources. With nothing particular of use in the immediate vicinity, we advance, emerging into a world of dazzling colour.

Beneath the light of a lime-green sky, we make our way slowly through the bright orange grass, brushing past blue-fronded ferns, and looking up at palm trees with crimson leaves. It's familiar ground in one sense: this is, after all, where the game's E3 demo began. But there are none of the dinosaurs, rhinos or deer you saw onstage. We're taking a detour, striding forth in a new direction. "You are literally the first to come here," says programmer **David Ream**. Not the first outside Hello Games; the first ever. This is uncharted territory.

"THE GAME IS SUCH THAT UNLESS WE FAKE IT, IT WILL NEVER STAND UP TO THE STANDARD FIVE-MINUTE HANDS-ON"

During his time onstage at Sony's conference, Murray actively invited players "to help us discover a little bit more" about *No Man's Sky*'s boundless universe, but it's clear he's not entirely comfortable with our desire to press on. This isn't the kind of manufactured demonstration we've grown accustomed to, because the developer isn't controlling what we're seeing, beyond turning the minimap off ("It's a bit ugly right now") and equipping us with a jetpack that we wouldn't ordinarily have earned at this stage of the game. We press X on the DualShock 4 and hear a gentle hiss as we're lifted up to higher ground. We find

a shallow stream, but there are no fish underwater. We're quite happy just spending some time in a world that feels at once familiar yet wonderfully alien, but it's clear this isn't enough for Murray. He wants us to see deer, a building, some resources to mine. "It's not as ready as I want it to be," he mutters. Eventually, reluctantly, we hand back the controller.

No Man's Sky is, quite evidently, a difficult game to demonstrate. "Ultimately, the game is such that unless we fake it, it will never stand up to the standard Gamescom five-minute hands-on," Murray admits. "We've been trying to explain this to Sony, that some people would have a very boring experience sometimes. Yes, I would love it if you could walk around for five minutes and it knew when the demo was going to end and this amazing beast suddenly jumped out of the woods. But you would instantly know it was a fake, so that would also just make you worried about the game. Ultimately, people will just have to wait."

The game has changed significantly since its debut at the VGX 2013 awards, but not in the ways that a game would traditionally evolve during a standard development process. For its E3



demonstration, Hello Games didn't have to just build a new level, but an entirely new universe. "What we showed at the VGX was like a prototype," Murray explains. "You could fly around and have some fun in it, but it wasn't nearly as deep or interesting as the universe we have now. And the one we have now, and why I hated giving you the controller, is not nearly as deep or interesting as the one we will ship with."

"We've talked a bit about a seed value that we can generate everything else in the universe from," programmer **Hazel McKendrick** says, "but actually we'll change the rules a bit. We'll change some tech, and then, when we start again with the seed value, we'll create a completely different universe that uses our new rules, new tech, new creature AI and things like that. And the

universe will change fundamentally. So the one we have now is fundamentally different and more interesting and more varied than the one we showed at VGX."

It's a universe underpinned by a series of mathematical formulae whose outputs will be the same each time. This allows Hello Games to build a world that is entirely consistent, but which doesn't have to be kept in memory. Once you fly away from a planet, that information is cast aside, but fly back to the same spot and nothing will have changed, even down to the tiniest cluster of rocks by your feet.

From a development perspective, this allows Hello Games to make incremental improvements that apply universally. It can be difficult to control, however, particularly since each of the development team is working on a different universe at the same time. "I can be working on my

Points of interest will be marked on your minimap, such as resource-rich areas and landmarks that you or other players have uploaded. Each object is marked in a similar fashion, though, preserving the sense of mystery – you won't know what a waypoint denotes until you get there



After a while, the wear and tear on your craft is clearly visible. Hello Games is hoping some will form an emotional attachment to their beaten-up old ships

machine and introducing a type of tree and saying, for example, this tree grows on slopes,” says artist **Grant Duncan**. “And I set the angles [of slope that] it grows on and the direction the sun has to be for it to grow, and I can then check that in. But, obviously, if I haven’t checked my machine to get an idea of how that might look in different environments, everyone will suddenly have all these trees on different planets.”

“That is the most common thing that you do: accidentally swamping the entire world with something, like an entire surface of a planet that is just solid trees,” says Murray.

This caused a number of problems in the build-up to E3, Ream recalls. “‘Sean! What have you done? There’s a mountain right in the middle of the cave!’”

“That did happen quite a lot,” Murray admits sheepishly.

At the same time, these procedural foundations have made possible what

would be an unfeasible task by hand. We’re given a rare behind-the-scenes look at the tools that allow this to work, with a tree used as the first example. “Normally, if you were working on *Far Cry*, say, you would create maybe ten different tree models,” says Murray. “You’d copy-paste it a load of times and

“‘SEAN! WHAT HAVE YOU DONE? THERE’S A MOUNTAIN RIGHT IN THE MIDDLE OF THE CAVE’”

that would create the *Far Cry* forest, and they would look better than ours, probably – far more detailed.”

Murray likens Hello Games’ approach to an MMOG character creation tool, which allows you to pick from a series of prototypes or adjust sliders to make visual adjustments. “We have that, but we have it for every prop. And we have what we call a grammar

that describes this. For a tree, it’s quite simple: it’s got leaves at the top and a trunk, and the branches always split in two. And this system creates different grammars for different things.”

With a single click, Ream brings up about 20 different variants of the prototype tree. Another click reveals as many again. Each still resembles a palm tree, but each is different in colour and design, from their leaves to the bend on the trunk. In other words, Hello Games needs only create one tree to potentially generate an infinite variety of the same. “We can create a forest [where] every tree is slightly different,” Murray adds. “But we can also create thousands and thousands of forests that are each unique. And we won’t create just one tree as a prototype, we will create hundreds.”

The same applies to ships, creatures and everything else that populates this unfathomably vast universe. To check that all the changes are working, Hello Games has built a system that sends out AI probe droids across the universe. Each of these visits planets to create animated GIFs of their surroundings, which the developers will then view on the main server to make sure all is going to plan, and to look out for any unpredictable consequences of the adjustments they’ve made to the algorithms. ►

LOGICAL PHALLUSY

One of the simplest procedural algorithms in *No Man’s Sky* is the one for giving things names. There will be a different version of this for plants, planets and creatures to create the equivalent of a Latin name, but the first to discover each can then give them a common name that will appear wherever they’re encountered. It’s a system that Murray acknowledges is open to abuse. “I’m sure someone will carve a path across the universe naming everything ‘Penis’.” But some people take great pride in playing just to explore, and it’s lovely to then be able to put some sort of stamp on it. We’ve found that people like playing it ‘properly’ and trying to think of nice names, and it would be a shame for people not to have that ability.” Murray adds that players will have the option to play the game offline, and name flora and fauna on their terms.

CREATURE CONTORTS

The team is currently discussing the level of information to give the player when they encounter a creature. There's particular debate over whether or not explorers should be informed if a creature is hostile. "We had a printout that would display that information and it removed some of the [mystery]," says Murray. "Maybe we'll just do it for the creatures that have been discovered already, but at the moment we're thinking that you won't have it."

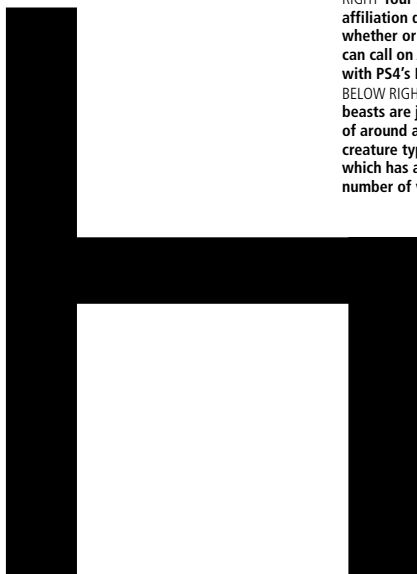
Duncan suggests that the game's visual language will be enough to inform players. "You'll be able to look at creatures in the same way as you can look at a certain

ship and [know] that it's going to be very fast and very manoeuvrable. It will come down to how we author those things. If you were walking around in Africa, there are certain creatures where you'd think, 'I'm going to stay away from that,' like a lion. But if you see a zebra plodding around, you know it's all right."

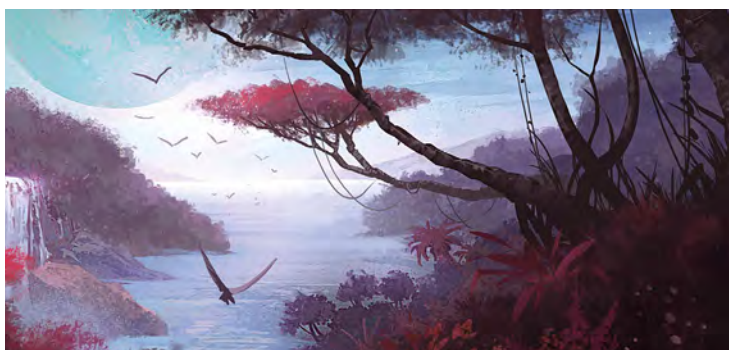
The likely decision to remove the information, says Murray, is about respecting players' intelligence. Smart players naturally exercise caution when encountering something that's much larger than them. There may, however, be the odd surprise. "I do really want to have a little white rabbit that kicks your arse," laughs Duncan.

These are all variants of the same animal type, or rig, that have been generated with a single mouse click. Out in the wild, you'll notice they vary more in size. Each mutation changes the beast's underlying bone structure, and the animation will be adjusted accordingly





RIGHT Your status and affiliation determine whether or not you can call on AI wingmen with PS4's D-pad.
BELOW RIGHT Flying beasts are just one of around a dozen creature types, each of which has an endless number of variants



FROM TOP **Hello Games'** sole artist, **Grant Duncan**; programmer **Hazel McKendrick**

overing above a second planet, Soleth Prime, we spot some small islands floating above the surface, an addition made between the VGX build and the current version. You can land on them, of course. "We're continually improving the universe and making it more diverse," says Murray. "We start out by covering the basics – so at one point I put in erosion and volcanic formations and glacial formations and things like that – and now I'm onto more weird and crazy formations. That's a direction Grant pushes me in more to just do things that are unique and interesting. You're working backwards from the kinds of things that are in sci-fi art and thinking, 'How would that occur?' So now I'm doing what I'd refer to as 'heavier mutations', more alien things. It's hard to describe, because you don't actually make a system to make floating islands, you make a system to make [their existence] possible."

Part of that environmental diversity comes from using an alternative periodic table, though this created friction. Murray fought at first to keep the elements the same as the real world, but eventually gave in when the implications for

"I WOULD LIKE PEOPLE TO REACH THE CENTRE OF THE GALAXY AND FEEL LIKE THEY COULD PUT DOWN THE PAD"

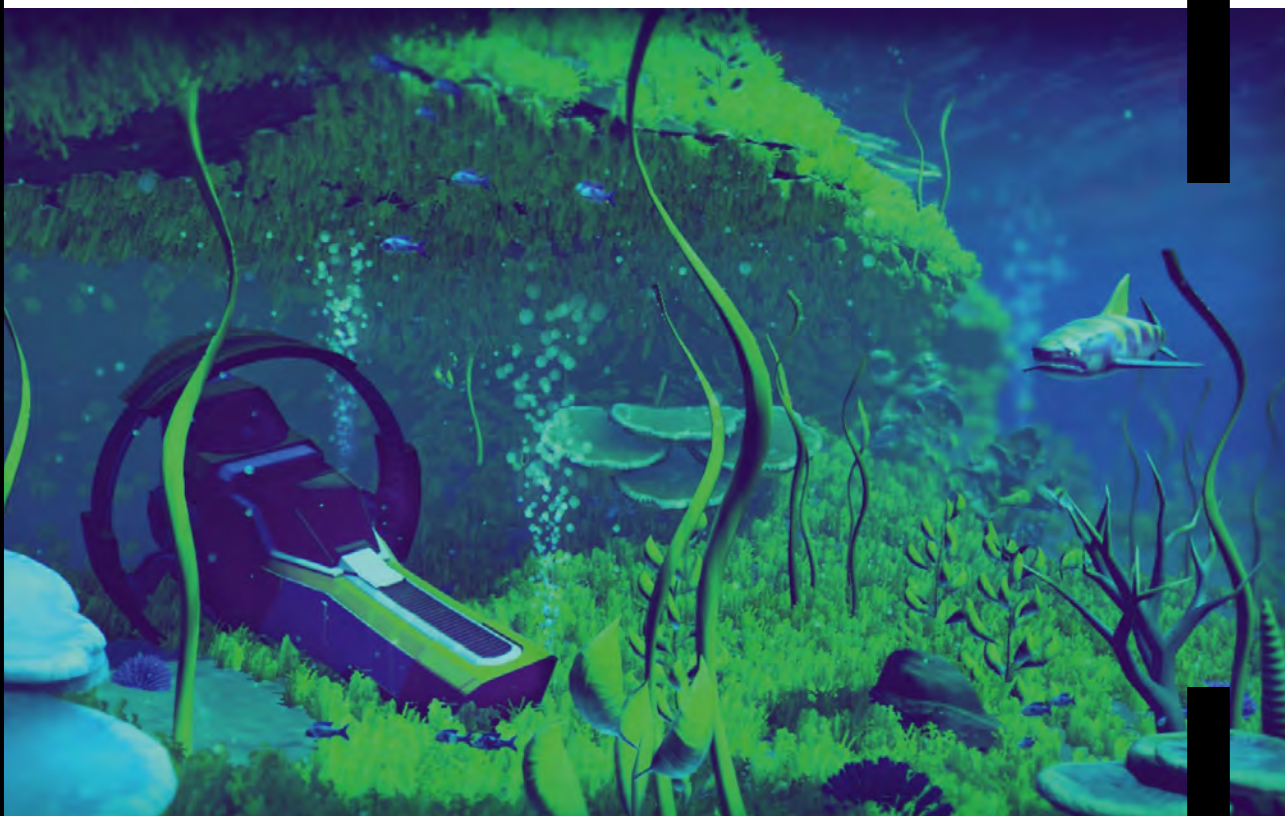
gameplay ended up limiting the game's scope. This ties directly into the game's use of resources, which are used to improve your avatar's suit and your weapon, and can be traded at space stations to earn money to upgrade your craft, or buy a new one (perhaps with an increased cargo capacity to transport larger numbers of resources). Even the most barren planet can be a literal gold mine, Murray says, though you'll only find rarer, more valuable materials as you get closer to the centre of the galaxy. "You can combine different resources," he says, "but a planet generally only has one type, so to maximise your [profit] as

a trader, you might visit a few different planets, then combine [resources], then go to a space station and sell it. And that is based on this periodic table that we won't tell you anything about."

That 'show, don't tell' approach extends to the game's lore. Hello Games has a narrative written down on paper, with a reason for the player's presence and their activities, and details of various races that preceded you. There will be an antagonist of sorts – something Murray terms a "malevolent force". And there will be a compelling reason to head towards the centre of the galaxy, as well as an ending that Murray suggests will provide the player with a sense of closure.

"I would like people to reach the centre of the galaxy and feel like they could put down the pad, that they had completed the game. Because it bothers me with games that go on forever. In an ideal world, at that point, others would feel like continuing to play and we will give them a reason to do that."

You shouldn't, however, expect cutscenes, dialogue or even much text within the game, outside the bare minimum for the UI, and details of the flora and fauna you've discovered. The



narrative background, says Murray, is a means for Hello Games to build a consistent world, and for everything within it to have a logical explanation for its presence. "When you find, say, a building," he adds, "we'll have had discussions about why that type of building is there, the type of architecture, what kind of materials it's constructed from. We fully expect when the game releases that no one will pick up on it, or make any sense of it, but hopefully they won't think the opposite, which is that it's a mishmash of styles. Even things like seeing certain insignia on ships and then again on buildings, and also some elements of that being in the UI when you interact with those things, is nice. I don't really feel the need as a player to know everything about that; it just feels a bit more like this universe is a real place."

As such, you won't see any checklists of objectives or UI popups. You won't be told your morality has shifted, or that you have destroyed four out of six freighters and earned a ship upgrade. "Exactly!" laughs Murray. "But we laugh about that, and yet that's what normally happens. Even in *Battlefield 4*, where you're in this incredible simulation of war. The audio in that [game] is just amazing and it feels really real. And then you shoot somebody and you get like a combo or whatever and it pops up. So [in *No Man's Sky*] you won't get a message saying that there is a bounty on this person, go and attack them, find them in this area. That's something we want to avoid. It's not like I hate those games – there's just enough people doing it that we don't need to."

With no extrinsic motivators and little by way of traditional direction, ►

Suit upgrades will allow you to breathe underwater for longer, or survive in toxic environments. Certain types of aquatic lifeform may present more pressing concerns, though

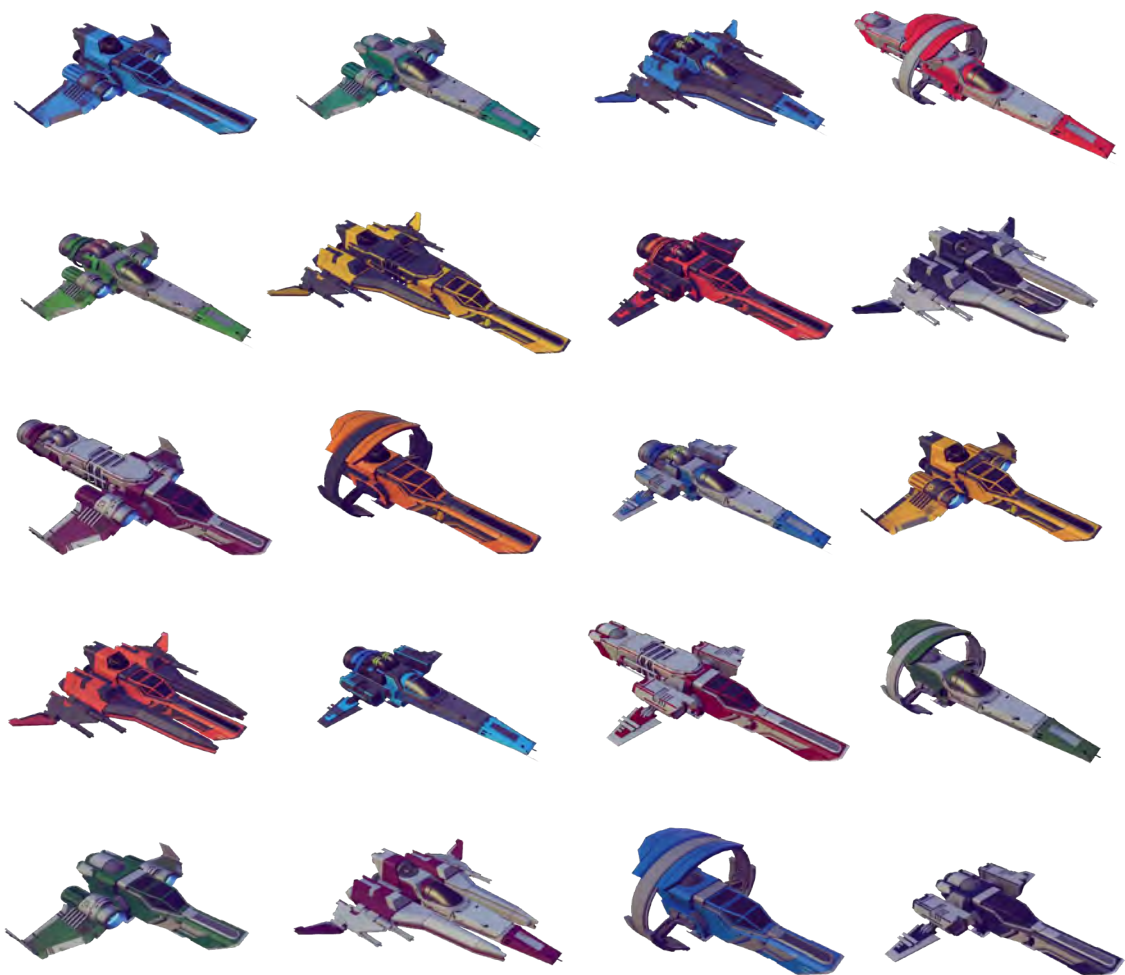
A R T O F C R A F T

There are three different classes of ship in the game, each with multiple prototypes. Fighters are light and symmetrical, while trader craft tend to be bulkier and slower, but with heavier weapons. Each ship will have between one and three different armaments attached, and you'll be able to upgrade them, with Murray hinting that enhancements will be more interesting than simply more power or a faster rate of fire. Explorer ships will have much better hyperdrives and stealth capabilities, allowing pacifists to run from every fight. You won't be restricted to a specific path by your choice of ship, however: there are simply some that are better

equipped for certain tasks than others. "At no point are we going, 'I'm an elf; I'm a dwarf; I'm a druid,'" says Murray. "You're not choosing a class you can't escape from, you are just buying a ship."

Again, the player won't be encouraged towards or dissuaded from buying a specific ship, but there will always be visual hints about what craft are designed for. We're shown a number of prototype dropships, where smaller craft have one set of wings, while those with a larger chassis have two sets. "Or in this case," Murray gestures towards a large prototype dropship, "you've got a blatant ripoff of the Millennium Falcon cockpit!"

As with the creatures, these fighter-class ships haven't been modelled individually, and so demonstrate the kind of variety that you can expect to see on your travels. The algorithm that made them may be different, but all these craft can be generated in an instant as well





PS4 NOW

No Man's Sky is coming to PC, but it will launch as a timed exclusive for PS4. So has that changed the game in any way? "I actually got in a little bit of trouble for saying that we wanted the game to feel really 'console-y'," says Murray. "We've always had PC in mind, but in my head [console-y] means solid framerate and immediate controls. I think a PC game can be 'console-y', and it's [intended as] a compliment, but I get in trouble for saying that." But while Hello always planned for its game to come out on consoles, knowing its lead platform has been useful. "Unlike most games, the actual hardware really affects what we can do," Murray adds, "in terms of the richness of the worlds and things like that. It isn't just adding a veneer of resolution, or extra antialiasing options. It has a real effect on what we can actually do in the universe."

Hello Games is hoping that your natural curiosity – and the richness of the worlds presented – will be enough to keep you interested. While Murray insists that the studio's commitment to the plausibility of its universe will never get in the way of how the game plays ("When something looks super-awesome, that normally wins, too, scientific or not," says Ream), *No Man's Sky* is a game that dares to ration out its biggest moments. The majority of planets will be empty and uninhabitable, and the chances of you finding several new species, as seen in the E3 demo, in one place are slim. It's a fine balance that the studio is clearly agonising over, its desire to not demoralise players in constant friction with its hope to amplify the sense of discovery when something significant happens, such as your first sighting of a dinosaur.

"This is something that's been on my mind a lot," says Murray. "Especially since E3, now that we have a lot of interest. If the mainstream gamer plays our game, which is something I didn't really expect that they would, will they be at a bit of a loss? Maybe they're not quite as jaded with *Call Of Duty* as you or I might be, or don't find it quite as predictable. I mean, I would personally love to see *Call Of Duty* with more empty corridors and tension building, and that

could make it amazing, but maybe other people don't think that."

Yet the success of the likes of *Minecraft* and *DayZ* give him hope that publishers do indeed play it safe too often, and that the average player is far smarter and more open to new ideas than perhaps the industry gives them

"WHEN SOMETHING LOOKS SUPER- AWESOME, THAT NORMALLY WINS, TOO, SCIENTIFIC OR NOT"

credit for. "Yes, there will be some people who pick up a pad or a mouse and keyboard and start out on a planet that is reasonably boring and not much happens on, and they may be totally at a loss. But I think for the majority of the people it'll be interesting. It'll be a bit of a culture shock, but it will actually be interesting."

Early playtests have yielded promising results that seem to back up Murray's

If you're not the most accurate shooter – and you're equipped for it – a generous targeting system only requires you to point your nose near a bogey to loose off a missile or two

theory. Players will, he says, naturally adjust their mindset when they're not given explicit instructions, and instead attempt to test the boundaries of the world. They will fly into space and land on another planet, or pull low above the surface and climb out in mid-air, before returning to the cockpit and flying around some more. "They will almost try to break the game, and then find, hopefully, that it doesn't break and it's quite a nice feeling of childish experimentation. Which is how I felt first playing *Minecraft* – there's an awesome moment where you first dig into the ground and find some caverns. Everyone has that and you're like, 'Wow, it's real!' That was something I hadn't had that much in games since I was playing on my Amstrad or Amiga, where games were often much more open and just left it to the player to figure out how the health system worked or how just even how to progress." ►



VOXEL ASTRA

During a look at the tools used to build planets, Murray and Ream take us to Soleth Prime and show us a distant view of Oria V. From the surface, we can see real mountains and canyons at a low level of detail. "This isn't a texture, it's generated voxels, and as you fly towards it, they get increasingly more detailed." There are several levels of detail, from those that produce terrain able to be seen from a kilometre away to the very finest level, which handles minutiae such as rocks and grass. You'll never be able to outrun the procedural generation in-game, but Murray uses the debug camera to move 2,000 times faster than normal. Even at this rate, there is no loading, merely a lower LOD, while the scenery takes a few seconds to catch up when we stop.

et for all the looseness of *No Man's Sky's* structure, the space it gives you to experiment, immediacy is key when it comes to core interactions in its universe. You won't have to witness a laborious animation when climbing into and out of your ship; press Triangle and you'll enter and exit the cockpit almost instantly. And while the juddering whine of the engines, the noisy rumble as you deploy the landing gear, and the accompanying screen shake might attempt to convince you otherwise, landing your craft is a simple, straightforward affair. Space combat, too, has a similarly arcade-like accessibility. It might not be entirely authentic, but empowerment is the aim.

"We want to get you going on that journey as quickly as possible," says Ream. "We don't want to mess around with the intricacies of getting into a ship or how long it takes to fly out of an atmosphere. It's more: 'Wow! Now I'm in space! That is cool!' The important fun bits are the bits we want to stretch out and highlight."

"Something that I think people don't necessarily get or expect is that ultimately we are trying to make a fun game!" adds Murray. "It should take hours to get

[between planets] at realistic speeds, but that would be monotonous. It is exciting to have this universe where you can see something and just go there. At E3, an American journalist said, 'Oh, I get it now – it's a Han Solo simulator', and that is what we want. Han doesn't sit there for ages like you would in *Elite*, waiting ten minutes while The Blue Danube [waltz] plays as this dot slowly becomes a circle. That's not what it's about. It's about the fun of exploration, like if we all had spaceships right now and we could get in them and just fly off across the universe. We want that feeling."

Hello Games' biggest challenge now may be knowing where to draw the line, and not just in terms of what it's prepared to give away, but how the game itself develops. Murray has said that when *No Man's Sky* is released, not everything it

"SOME PEOPLE WILL BE DISAPPOINTED IT'S NOT HALO. WE CAN'T ASSURE YOU IT IS DEFINITELY ALL GOING TO BE OK"

hopes to include in the longterm will be possible, but dismisses the idea that this will be anything like Early Access. "A lot of the fun of making games for me is the craft of it, and we've always had this set of... it's not that we have Nintendo-esque values, it's [more] like we aspire to Nintendo values. So the idea of releasing something that's half-broken or half-finished does not appeal to me at all."

This isn't an example of that dreaded term 'games as a service' ("That phrase scares the life out of me!" laughs Murray), but something more like after-sales care. "Games like *Minecraft*, *DayZ*, *Starbound* and *Terraria* have shown this new way of making games where there is a core experience that is brilliant and is fun, but every update brings something new."

In other words, the *No Man's Sky* you'll play at launch will be quite different to the experience you'll have planet hopping a year later. And while Hello Games doesn't want to change too much about the core game, it isn't short of ideas about how it might develop. For example, in the game there are already grenade-like plasma balls, and your weapon – a utilitarian multitool, which, like much of *No Man's Sky's* technology, has a wonderfully retro-futuristic look – will allow you to "blow holes in things", but Murray and Ream hint at more extensive terrain deformation, ground vehicles, and a more traditional multiplayer mode to come later.

The studio is certainly not shy of ideas, then, and indeed Murray suggests that there are so many that could be applied to the core of the game that it's difficult to know where to stop. "There are continual ideas that we have to put in a box and not touch right now," he says. "We're this small team already making an impossible game. Hopefully, if the game is a success, we'll go and open that box a little bit and dip into it. That is more appealing to me right now than moving on to another game – to take this game and to fully explore it."

It's hard to imagine that Hello Games' ideas chest will remain sealed, because this is a universe that positively invites exploration. For some players, *No Man's Sky* will indeed be that Han Solo simulator, but others can instead adopt the role of interstellar Attenborough, documenting rare creatures, which can be viewed in an in-game encyclopaedia once uploaded. Both approaches will be equally valid. Players will have the freedom to happily tinker about at the fringes of the galaxy, even as others are subtly encouraged towards the centre. "We're not making *Proteus* in space," says Murray, before instantly admitting that for some players it will be a similarly ambient, even meditative, experience. "Some people will be disappointed that it's not *Halo*," he says. "We can't assure you that it is definitely all going to be OK. We can't [guarantee] that you, as somebody who maybe plays only *FIFA* and *Call Of Duty*, are going to like it. But isn't it good that it exists?" ■

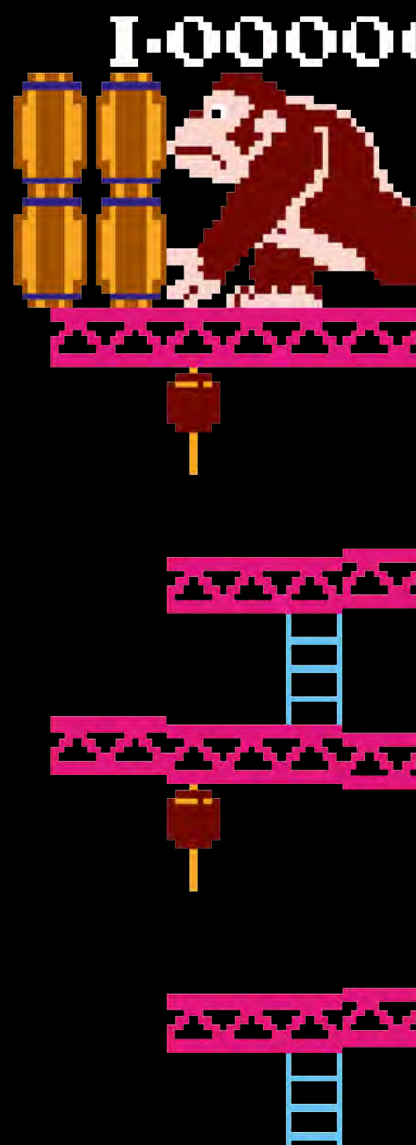


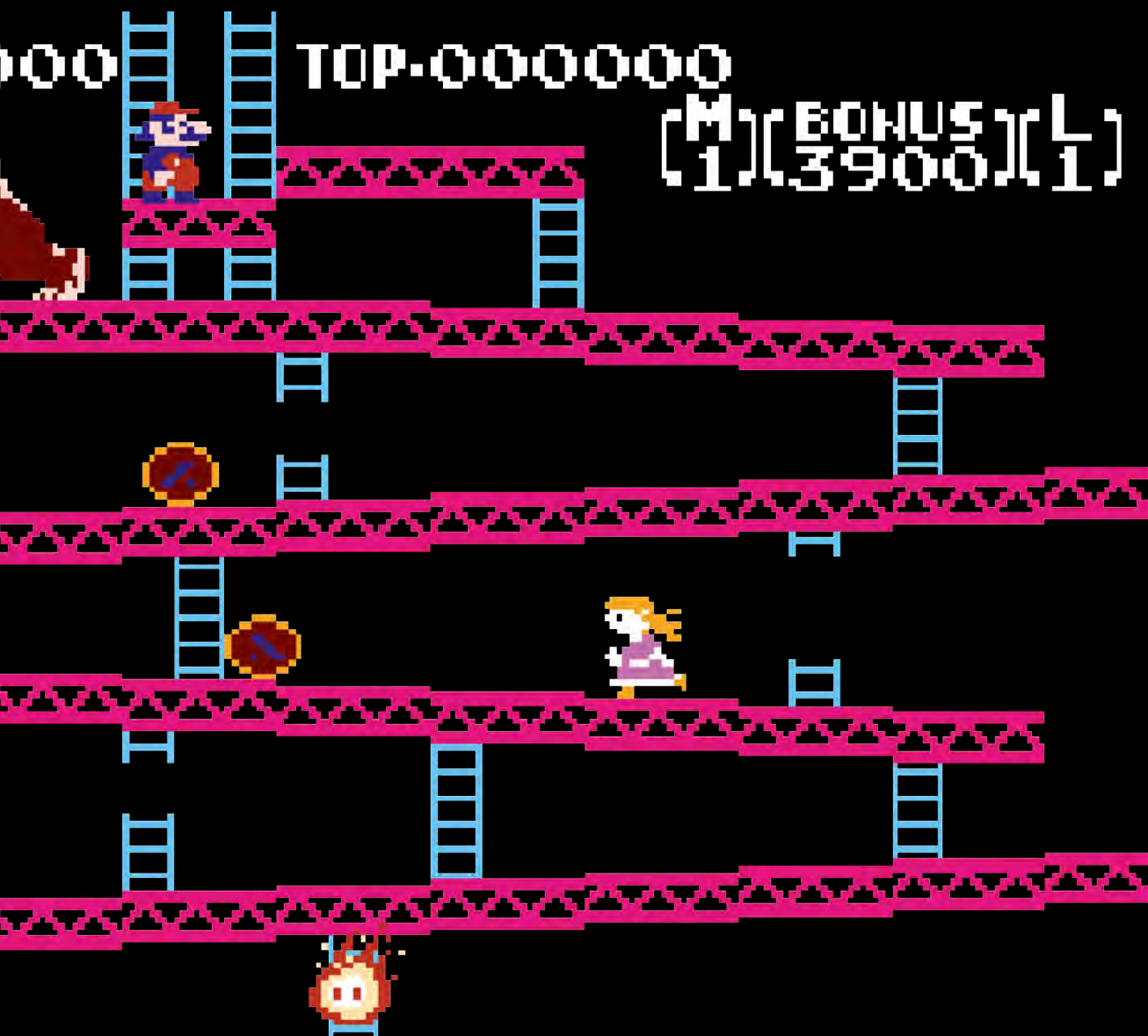
ABOVE Murray is still keen to hold back as many secrets as possible until launch. "When you've seen 16 different videos of *Watch Dogs* before it comes out, you almost can't help but feel disappointed by it, because nothing's surprising any more." LEFT See that planet? You can go there. The now-clichéd open-world boast feels far grander when applied to *No Man's Sky*

Game Changers

Inside the ultra-
committed world
of the hackers
reconfiguring old
console titles to
make them do
things their creators
never imagined

By RICHARD MOSS





The most famous hack of recent years is Mike Mika's tables-turning NES *Donkey Kong* mod, which he created in order to let his daughter play as Pauline on a mission to rescue Mario from the great ape

When a serious injury ended Phil 'Keson' Earley's professional wrestling dream a few years ago, an N64 game called *WWF No Mercy* helped to pull him out of his depression.



"It was something I was good at, and at the same time I could talk wrestling with folks," he says. However, *No Mercy* was the last of its line. Its developer, AKI Corporation, lost its contract to develop THQ's wrestling games, and so Earley set about hacking and modifying the game's ROM file to add moves and wrestlers. He helped build a fan community, Old Skool Reunion, where other *No Mercy* hackers could swap notes on how best to dismantle and reassemble a game that was never built for modification.

In so doing, Earley joined a burgeoning underground movement that dates back to the mid-'90s, when emulators for old consoles first spread across the emerging Internet. In message boards and forum threads, curious fans started to wonder if they could tinker with games that had been locked away within the ROM chip on cartridges the way they could modify PC games of the era. ROM hacking shares much of the same spirit of PC game modding, except it's never legitimate, and usually mired in hexadecimal maths.

The scene has many dispersed clusters of special interest hackers, such as Old Skool Reunion, but operating as a hub is romhacking.net (AKA RHDN). RHDN's founder, **Nightcrawler** — who requested that we omit his real name — was there soon after the beginning. "We were

Phil 'Keson' Earley and his hacking comrades have ripped and modified *WWF No Mercy* to bits, giving 2000-era Dwayne 'The Rock' Johnson some fresh competition



working on inaccurate ROM dumps of *Super Mario Bros* with pencil, paper and a hex editor,” he recalls. “There was no central location [where you could] learn the trade. You were lucky to find some notes someone posted on their personal web pages on what they were doing.”

ROM hacking was uncharted territory, and Nightcrawler was among its earliest explorers. It’s a very different state of affairs today, with thousands using advanced debuggers built into emulators for most of the ’80s and ’90s game consoles, able to access detailed technical documents and armed with powerful tools such as **FuSoYa’s** Lunar Magic *Super Mario World* level editor. ROM hacking has grown up, and the results are startling.

Earley and a handful of friends are four years and a fraction of the way into developing *Showdown 64*: an enormous *No Mercy* hack that, thanks to emulator Project64’s limitless allowance for immensely long GameShark codes, will more than quadruple the playable wrestler roster to somewhere in the vicinity of 400. The idea is to squeeze in every single wrestler the team has ever heard of, with characters dating back to the ’50s, and to remake the arenas. Each wrestler gets his or her own custom skin and moveset, with the former crafted in Photoshop and the latter generated by splicing together existing move animations with help from community-created OpenOffice tools. If they’re lucky, Earley jokes, the project might be finished by the time he retires.

Earley points to a hacker with the handle wldfb as the mastermind of *No Mercy* hacking. “I don’t know how he finds values,” Earley says, “but he’s managed to change a few fundamental things in the game [and] fix bugs.” It was wldfb who figured out that you could expand the roster by



Released some 14 years ago and still popular today, FuSoYa’s Lunar Magic level editor for *Super Mario World* allows anyone to design new adventures for Nintendo’s mascot. Some of the results are spectacular

modifying the extra attire slots every wrestler has, and it was wldfb who made *WrestleMania* legend The Undertaker nigh-on unbeatable — just like his real-life counterpart.

But between Old Skool Reunion and its many now-defunct forebears, *No Mercy*’s hacking scene is much bigger than a few individuals. “I’m willing to say that *No Mercy* has been hacked, modded, redone, ripped apart and just overall had more work done to it [by fans] than any other N64 game,” Earley says. “It’s unreal. There

are guys that still dig through bare code looking for values and how we can manipulate them, just to get one more new thing in the game.”

Like digital archaeology, ROM hacking is big on discovery and exploration, except with an added element of creation; as RHDN staff member and former translation ROM hacker **Markus ‘KaioShin’ Hildebrand** says, it’s a thrilling kind of detective work. “Every script control code deciphered and every menu understood and changed is a ▶

GIRL POWER

Game designer Mike Mika’s three-year-old daughter wanted to play *Donkey Kong* as Pauline, with Mario as the damsel in distress. She couldn’t, of course, because the game wasn’t designed that way. But it nagged at Mika, so he found out how to hack the NES version’s ROM, redrew and replaced the sprites, swapped the ‘M’ on the bonus indicator with a ‘P’, and put a work-in-progress video up on YouTube. The video spread like wildfire across the Internet while Mika was showing his daughter the hack the next morning, his work having been picked up as a feminist symbol and a statement that girls can be the hero, too.

MARRY ME

Phill 'TheRealPfhreak' Spiess was neither the first nor the last to hack a marriage proposal into a ROM, but his *Chrono Trigger* proposal from October 2008 is perhaps the most famous of the lot. Spiess fused the Denodoro Mountains area in the game (which his then-girlfriend was playing at the time) with the real-life site of their first date, mixing in references to their favourite memories, lyrics from her favourite song, and even her cat (which follows Crono and co around). It wasn't until she saw her name on the screen and looked across to see Spiess on one knee, holding an engagement ring, that it occurred to her this area was not in the original game. You can watch a playthrough of the hack on YouTube. Oh, and she said yes.

little puzzle on its own, with a 'Eureka!' moment at the end."

Such hackers dig carefully through executable code in search of secrets and a comprehensive understanding of how the game works, then they twist and reshape that knowledge to their own ends, whether it be to give Mario a new hat, make Pauline the hero of *Donkey Kong*, drop Sonic on the planet Zebes, or update player rosters and expand mechanics.

The fact that NES hit *Tecmo Super Bowl* is nearly 23 years old and has long been surpassed by the likes of EA's *Madden* series isn't lost on **Dave 'bruddog' Brude**. But he loves its simplicity, and he's been actively engaged in tournaments – first with friends, then with strangers over the Internet – since the very beginning. Brude gradually waded into the hacking side of things via online tournaments and leagues played with emulators, with over half the community participating through dial-up Internet connections.

"One of the things that bugged me with the original *Tecmo Super Bowl*," he says, "was the fact that it is nearly impossible to return interceptions, because the defender is too slow to deal with offensive players that become defenders on interception returns." Most of Brude's hacks overcome issues of this nature. They fix the flaws that drive some players crazy, or add a touch of realism where it was lacking before.

The *Tecmo Super Bowl* community, meanwhile, collaborates on a yearly

roster update complete with correct names (and all 32 of the teams, too, thanks to an older hack by cxrom that overcame the original 28-team limitation). These dedicated fans have a multitude of tools and notes to assist them. "We have powerful tools, such as the FCEUX emulator, that allow inline debugging, breakpoints, the ability to see what part of the ROM has been accessed, the reloading of game states and so on," Brude explains. "Today, we also have parts of the game disassembled and [the code] commented." The group developed tools to make alterations

"ROM hacking allows bugs to be fixed, new levels to be created, or even for completely new works"

such as roster updates possible for anyone, too, even the code-illiterate.

When it comes to opening ROM hacking up to a wider audience, few operate on the level of FuSoYa. His *Super Mario World* level editor, Lunar Magic, first appeared in 2000, rapidly gathering attention and pulling the scene's focus away from NES *Mario* games. It came from humble origins, its idea born of a rudimentary map editor that FuSoYa created simply for translating street signs in Japan-only Super Nintendo RPG *Pretty Soldier Sailor Moon: Another Story*.

It blossomed. A dedicated *Super Mario World* hacking community soon

appeared, mostly built around Lunar Magic, and FuSoYa's tool became the perfect entry point for ROM hacking. "A casual user can sit down with the program and make a basic level within minutes," he explains. "But if you want to get a little more into it, you can replace the graphics and use other tools to insert pre-coded blocks and sprites that customise the gameplay. And advanced users can go even further by learning assembly and coding their own blocks and sprites."

People have hacked in marriage proposals, designed levels that play themselves, created custom graphics and music and much more. As a result of all this, the game endures. Lunar Magic has been regularly updated throughout its life, but it's still just a level editor for a 24-year-old videogame released on the launch day of Nintendo's Super Famicom.

"If someone had told me back in 2000 that, over the next 14 years, this many people would have used Lunar Magic to create countless *Mario World* hacks and would still be doing so, I wouldn't have believed them," FuSoYa admits. "Sure, Mario is popular, but 14 years of *Super Mario World*? When the editor was first released, I figured I'd just spend a couple of months touching things up in the program and it'd be done, and people would play with it for a couple of years. Yet here we are, and it's still being actively updated and used."

He suspects the appeal rests partly on Lunar Magic's easy extensibility, and partly on Nintendo's penchant for re-releasing the game on newer platforms, thereby exposing it to new audiences who in turn take up hacking the game.

Quality is an enduring factor, too. There are plenty of fans prepared to argue there has never been a better 2D platformer than *Super Mario World*, nor a better wrestling game than *No*



Mercy. “Whenever I would buy a new *SmackDown Vs Raw* or something like that,” Earley recalls, “we would instantly compare it to *No Mercy*, because I think the mechanics of it are just perfect. I’ll go on forums or even Reddit [and] see people talking about it. ‘Isn’t it great? Wouldn’t it be cool if they’d just make a new game based on the AKI engine?’ Most of the time, that’s where I snag new players: ‘Well, you can’t get a new *No Mercy* game, but there’s new moves and new rosters; people have been updating this sucker since 2003.’ It’s kind of a testament to how damn good that game is that people are still doing it.”

It helps that the professional wrestling scene is splintered, with dozens of rival promotions that will never appear together in a licensed videogame, but that can all be hacked into *No Mercy*. “Since you don’t have to worry about likeness rights or anything like that, you can put anybody you want in there,” Earley says. “You can have any dream roster.”

Earley’s motivations run deeper than that, though. “I think anybody who’s ever loved a videogame has kind of wanted to make one,” he says. “For me, I get a strange high from being able to take something like a game I love and manipulate it and change it. It kind of brings you closer to the game in a weird way. You’d be sitting there and you’re playing a game and you’re like, ‘You know what? I don’t like this aspect. I wish, if that thing would change — if this one little thing would change — man, it would be a lot more fun to play.’ And then when you figure out, ‘Hey, I can do that,’ that’s huge, you know. It’s like this explosion in your brain.”

Nightcrawler is driven more by preservation. A great many ROM hacks are about translating games for other audiences, often Japanese titles into English, and as such he considers



While *Chrono Trigger* fans wait for an official sequel to the much-loved collaboration between Square and Enix from 1995, hacking groups like the Ruby Dragoons have taken matters into their own hands

his work to be setting certain past injustices right. “Many games were never released to certain regions simply because naïve executives [thought they] couldn’t handle complexity,” he says. “For general ROM hacking, it’s about letting the classics live on.”

“ROM hacking allows bugs to be fixed, new levels to be created, abilities to be enhanced, or even [for] completely new works running on a classic game engine. These types of things allow classic games to continue to grow and live on long after their creators and publishers have abandoned them.”

This is exactly how *Chrono Trigger* hack *Crimson Echoes* came into existence. Intended as an unofficial sequel that would continue the story where Square left off, *Crimson Echoes* was hotly anticipated far beyond the

hacking community, and its development had almost finished when Square Enix swooped in with a cease-and-desist letter in 2009, mere weeks before the scheduled release. Lacking the coffers to handle a legal fight, the developers promptly abandoned the project and pulled all the associated materials offline. In January 2011, however, one of the team anonymously leaked a beta ROM online, ensuring that all of the team’s work would not be wasted.

A new group of fans known as the Ruby Dragoons used this beta ROM to carry on development under a new name, *Flames Of Eternity*. The Ruby Dragoons initially planned to just fix the bugs but soon decided to add in even more areas to explore and make a handful of changes to the plot. For the erstwhile project lead, **Giro** — whose real name we’ve omitted because

MOTHER TONGUE

Translation ROM hacking has lost much of its glamour now that many of the most highly sought-after projects have been completed, but Markus 'KaioShin' Hildebrand believes there's still plenty of exciting stuff to come. "I believe it will only be a couple more years before everything [that was] formerly Japan-exclusive for NES and SNES will have been translated," he says. But he's eagerly anticipating the crowdsourced translation for PlayStation strategy-RPG *Super Robot Wars Alpha* and an on-again, off-again translation of infamous Dreamcast in-joke *Segaga* that showed new signs of life last year.

he's currently in service for the US Army — it was a way to get his mind off the war during a deployment in the Middle East. Giro grew up with *Chrono Trigger*, and relished the opportunity to have a hand in continuing its story. "Who wouldn't want to take a time machine and have a chance to save the world?" he wonders. "Who wouldn't want that chance to be The Doctor?"

Giro stepped down as project lead last year to spend more time with his family, and an anonymous fan who calls himself **imMUNEity** took over the reins. ImMUNEity takes a defiant stance, declaring that he'll continue development offline if Square Enix squashes the project again. He's determined to continue *Chrono Trigger*'s story. "In the original *Chrono Trigger*, you never get a chance to explore the future after you've defeated Lavos and saved the world," he says. "My favourite part of *Flames Of Eternity* is that the saved future is wide open for exploration."

Even after having diverged slightly from and greatly expanded on *Crimson Echoes*, the version of *Flames Of Eternity* that imMUNEity inherited was ripe for further development. "I am getting to add a lot of what I felt was missing from the original game into this one," he says.

In some ways, it's the fans who own *Chrono Trigger* now. Square Enix still retains the copyright, a looming threat for any burgeoning fan spinoff, but the story, the world and the characters all live on with those who have been clamouring for a sequel for

20 years (the tenuously connected *Chrono Cross* and *Radical Dreamers* notwithstanding). "I honestly feel that Square Enix will never make a true sequel to *Chrono Trigger* or *Chrono Cross*," Giro says. "If they wanted to, they would have [done so] already. It's up to the fans to continue and expand upon the universe and the story. Maybe years down the line, it will return to Square Enix, but for the time being the best stories are well-fleshed-out fan mods."

Not all ROM hackers are obsessed with their game of choice. A network

"I honestly feel Square Enix will never make a true sequel to Chrono Trigger... It's up to the fans to expand upon the universe"

technician who goes by the handle **Skelux** made a name for himself in 2011 with the *Super Mario Star Road* hack, which squeezes an entirely new 3D *Mario* platformer into the *Mario 64* ROM. But he feels "no particular attachment" to the original game. "No one had really touched on hacking any other 3D platformers at that point," he says, so he thought he'd kickstart the scene, first with a single new level and then with a whole new game.

Star Road introduced 30 new areas, nearly 50 new audio tracks and 120 stars to collect in an imaginatively designed world that some players insist is better (and much, much

harder) than *Mario 64*. Yet Skelux himself is unsatisfied. "I find some of the original *Super Mario Star Road* designs embarrassing in contrast to my present standards," he says.

Skelux also thought the hack would go no further than the general ROM hacking community. "I would have put more work into it if I anticipated how much attention it would draw." The Mad Musical Mess level, for instance, lacks polish and is far too hard. "It doesn't even resemble a complete level. I didn't even add strings to the guitar, despite having a string texture in the level."

Now he's trying to set things straight. *Super Mario Star Road* is being ported to DS and, much like Nintendo's *Super Mario 64* DS port, it's getting tweaked and polished (or completely redesigned, in the case of Mad Musical Mess) to better suit the dual-screen handheld.

When that's done, he'll shift his focus back to making the *Star Road* sequel. "I feel that many people would enjoy playing through more of my designs," he says, "and I can be more considerate of details such as difficulty ramps this time." It's tough work, though. Skelux finds coding easy, while creative designs and plot points don't come so naturally. "Conceiving of that many unique ideas is very difficult for me, and I also want to avoid just repeating the same type of paths I used in other levels. I waste far too much time just rotating my level model in [Google] SketchUp and wondering what I should do next."

It's all done in the spirit of keeping the game alive and encouraging others to hack games too. "The more people we have in the community, the more fun remakes of these old classic games there are to play," he says. "It breathes new life into something that could have died long ago." ■



New Game Plus

Many enterprising ROM hackers have created total conversion hacks of games that don't simply change a few things but completely overhaul the experience. Here are six of the best

1 The Legend Of Zelda: Parallel Remodel

A *Link To The Past* has been hacked to bits at this point, but the most impressive unofficial offspring is the remodelled version of SePH and Euclid's popular *Parallel Worlds*. It tones down the difficulty and rejigs the dungeon designs, making it a must-play for any *Zelda* fan, even if it still lacks some of the magic of the Nintendo original. SePH is currently working on a sequel, *Parallel Universes*, which links *Zelda* to a multitude of other game franchises.

2 Super Mario Star Road

It takes immense skill to complete *Star Road*'s 30-odd areas, but the variety on offer makes up for the excessive challenge. The creative level design pushes *Mario 64*'s engine to its limits, while some of developer Skelux's touches even feel worthy of Nintendo itself. A DS version is in development, to be followed by a sequel.

3 Mario Kart R

For those who insist that *Mario Kart* peaked at the first entry, *R* is a godsend. It overhauls all the graphics – menus included – and modifies all the original courses, primarily by adding alternative paths and more shortcuts. It also replaces the malignant Toad with Kirby.

4 Chrono Trigger: Crimson Echoes/Flames Of Eternity

Both *Crimson Echoes* and its illegitimate spawn *Flames Of Eternity* offer fascinating glimpses of what a direct *Chrono Trigger* sequel could have been. These games also represent a portal for those who have long desired more than a peek into life during each epoch.

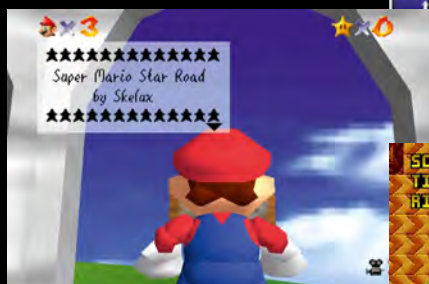
5 The S Factor: Sonia and Silver

Nintendo systems get the lion's share of attention in the ROM hacking scene, but we'd be remiss to leave out this fantastic Sonic hack, which pairs Sonic's Underground-spawned sister, Sonia, and time traveller Silver in a familiar quest to stop Eggman Nega from destroying the world.

6 **Mario Adventure** *Super Mario Bros 3* gets much more than just a fresh coat of paint in this adventure, which features modified graphics, well-designed new levels, four new power-ups, random weather patterns, infinite lives and more. One *Mario Adventure* follow-up was left unfinished, but a third one is in development.



1



2



3



4



5



6

A portrait of Martin Kenwright, a man with dark, wavy hair and blue eyes, wearing a dark suit jacket over a light blue shirt. He is looking directly at the camera with a slight smile. The background is a plain, light blue wall. A large white diamond shape is overlaid on the lower half of the image, containing text.

AN AUDIENCE WITH...

MARTIN KENWRIGHT

The founder of Evolution Studios and
Digital Image Design now has his
sights set on the stratosphere

By NATHAN BROWN

Martin Kenwright has big plans for Starship. The founder of Digital Image Design (DID) and *MotorStorm* developer Evolution Studios spent five years away from the game industry, but his returning venture is no traditional videogame developer. Starship, founded in 2013, has three projects in development: *Playworld*, a game for the underfed five-to-ten-year-old demographic; *Cybercook*, an interactive cookery app that lets you practise making meals from real-world recipe books; and *Forget Me Not*, a wearable AR memory aid for which Starship has several patents pending. Kenwright has also set up the Virtual Disrupt Fund, through which he aims to put Liverpool back on the game development map. It's ambitious, but he's earned the right to be confident. Here, he reflects on an industrious and illustrious career, his first E3 in seven years, the birth of *DriveClub*, and how taking the 'hippy pill' helped convince him that founding Starship was the way to go.

Tell us about DID. You were young, you expanded rapidly, and then you sold the company quickly. It must have been an exciting time.

It was an amazing time. The early days certainly were; maybe not so much at the end. Everything that could and can happen in business happened to me well before my 30th birthday. I had quite a humble upbringing on council estates on the edge of Liverpool. I'd had no formal training or education whatsoever; I was just spotted by a teacher in sixth form [and asked] to do some graphics for [ZX Spectrum game] *Strike Force Harrier*. I ended up doing a bit of freelance work. I was really keen to try exciting things, so I set up DID in my bedroom on a little council house outside Liverpool, just living at home with me mum, just doing it because I loved it. We turned up at Ocean's door with a demo of *F29 Retaliator* and before we knew it, we'd had a huge blockbuster hit.

We were chasing the love, not the money, and I think it showed in what we produced. We were very prolific, and we grew rapidly. By the age of 25, I was employing 45 to 50 people, without mentoring, without help, without training and without debt. We lived a very frugal, very hand-to-mouth existence in those first few, very tough years. Money came into the [game] business in the mid-'90s when PlayStation arrived; all of a sudden all of these players came in and the landscape changed – a lot of relationships and goodwill were washed away. It was tough at the end of DID. It just ended up like a Greek

tragedy. Everyone was wondering what I might do next as a person rather than with DID. So I agreed a sale with Infogrames and set up Evolution.

Where you enjoyed a good relationship with Sony. What was it like to work with Sony over the years? The original PlayStation was an immediate success, but there was a sense of overconfidence to the company by the time that PS3 came around.

When they first arrived, it felt like this sleeping giant of our sector had woken up. We were desperate to do [something on] PlayStation, but being so good at simulations on PC, everyone would say, "Yeah, but tell us about your new PC flight sim." We'd suffered from pigeonhole-itis, if I can call it that, ever since 1986, and looked enviously at our peers doing these high-yielding console games. I was desperate to move across, and when I did the deal with Sony, I realised what it was to deal with a true professional, world-class company. After coming from the hell of Infogrames... I'm a very loyal person and to finally deal with a proper heads-up professional company was just a breath of fresh air. They helped me get my confidence back; I wasn't swimming around in a pool full of sharks. It was, perhaps, one of the single best things that ever happened to the game sector, Sony producing PlayStation.

And yet you were every bit as pigeonholed at Evolution. You made driving games.

Oh, God, yeah, it was even worse. The thing about growing a new company is that startup's the easy bit. Scaling up can be hard, and we had to do it against a backdrop of yearly iterations of *World Rally Championship*. We'd say to Sony, "We want to make our own new IP," and we'd get comments like, "Well, you've not done an original IP on console before."

Concepts for *MotorStorm* and *DriveClub* appeared within two weeks of each other. [It was a] little bit different, obviously – MySpace was around, so *DriveClub* had MyRace – but it was no different to [the way the game uses] Facebook now. It's always been problematic, the safe route of sequels. The problem with success is that people want more of the same. It's been a constant rod for our back since 1986, with flying and with war, with driving and off-road.

***MotorStorm* will perhaps forever be associated with its trailer at E3 2005, which upset a lot of people because it was a prerendered sequence. Is it true ►**



Starship®

Kenwright's studios have always had a reputation for technical excellence in proprietary engines, but Starship is working with Unity, which Kenwright says has been vital in getting the team up and running quickly



Kenwright made the switch from PC to console during the early days of the PS2 era. Evolution made five *World Rally Championship* games for Sony's console before creating PS3 launch title *MotorStorm*



A selection of hits from Kenwright's career to date (clockwise from far left): *Strike Force Harrier* (ZX Spectrum, 1986); *TFX* (PC/Amiga, 1993); *MotorStorm* (PS3, 2006); *World Rally Championship* (PS2, 2001)

"I GENUINELY FELT IT WAS TIME FOR ME TO STOP FIGHTING IN THE SAME BACKYARD AS ALL THE CONSOLE DEVELOPERS"

CV

Liverpudlian Martin Kenwright set up his first company, Digital Image Design (DID), in his twenties. After carving out a niche in flight simulators and licensing his tech to NATO training programmes, he sold the studio to Infogrames before his 30th birthday. Next, he set up Evolution with Ian Hetherington. That studio developed five VR games before creating *MotorStorm* for PS3's launch. *MotorStorm*'s success led to an acquisition by Sony and Kenwright signed a contract with a non-compete clause that kept him out of the industry for five years. He founded Starship in May 2013, and his current team includes veterans from Studio Liverpool, Bizarre Creations, DID and Evolution.

that you only learned details of the final PS3 specs hours before the trailer was shown?

You're about to embark on a multimillion-pound launch of hardware that isn't quite built yet, but the technical data at the time, the initial specs, certainly pointed to that kind of capability. Producing all the assets for realtime, but rendering them into a movie... [it was what] we believed would be achievable. It was a good stab, a good guess, at what we felt we could achieve; at least when you set the bar that high there's no going back, and even if we fell short, it'd still be remarkable.

It's quite the motivational tool, too. "We just told an audience of millions that this is what we're going to do, so we'd better do it."

Yeah, that was essentially it. If you love what you're doing, you can do anything. We'd historically felt no fear because of what we'd achieved before. It was all done with the best, most honourable intentions.

Evolution was a great success, so why sell up? And why agree to stay out of the industry for five years?

I never quite recovered from DID. I had a great relationship with Sony; it felt like a good home and a good place, but I just felt so eroded, so tired. I'd been so prolific for 20 years. I'd ticked every box, and had an opportunity to take time out. I genuinely felt it was time for me to stop fighting in the same backyard as all the console developers and kind of go off. I had an option as an individual. It was almost like *The Matrix*: do I take the blue pill or the red pill? Do I become a hippy and disappear, or do I throw myself into this business?

I genuinely was happy to take a five-year sabbatical [Kenwright was forced to take time off by a non-compete clause]. The five years was just to say I wasn't going to turn up down the road and do a competing driving game.

It suited me. I was relaxed. It was my choice and my terms, and after that I went on another remarkable chapter in my life.

So what did you do? Did you take the hippy pill?

[Laughs] I tried for a bit. It was great, but some things changed. Having a family changed me dramatically. I realised, "Oh, hang on, maybe I don't want to be a hippy that lives up a mountain any more". And I saw what was happening, which I'd almost predicted anyway: all of a sudden, dev became cool again. I watched the bloodbath going on, people trying to figure out how to make money from social gaming, waiting for the chaos and the gold rush of the App Store to calm down, and I thought, 'It's déjà vu, this. It's 1993'. I've taken time out now. I feel rested. I've got all these great ideas. I'd been redeveloping properties, living out in the country, but all of a sudden I was starting to get this compelling hunger to do something. You need to do something that scares you every day; if you haven't got that, you've got nothing. I kinda realised that there was a big empty piece of me that I couldn't fill; I was actually missing going to work.

So you set up Starship. Why didn't you come back to the industry with a more traditional studio?

I've always been on the edges of things. The most cutting edge of [flight sim] tech led to doing things with NATO, and with driving games we went on to work with rally teams and hardware companies. You realise how insular the games sector is, particularly on console. They're too busy competing against each other to look up; the market potential is far greater than most developers really get. Like Google only scratches the surface of the deep web, there's all this potential deep below that we could expose using things that already exist, things we've done before, and cheaply and quickly.



Founded in May last year, Starship now employs 25 staff, many of whom worked at legendary, and now-closed, UK studios Bizarre Creations and SCE Studio Liverpool

Eighty per cent of developers are still fighting over 20 per cent of the market, and I didn't want to go and compete with *Call Of Duty* or *Forza*; it just doesn't make commercial sense any more. What if I could create new revenue streams that didn't exist before, and move some of the best talent in the world into untouched, unloved sectors that are worth billions? Can't we use all our incredible 3D experience and technology to disrupt entire sectors? It does sound a bit glib, but it was [about] moving from being players in a billion-dollar sector to being key players in a trillion-dollar sector such as health, or retail. It came from a big underlying philosophy about creating game-changing products in whole new universes. Create whole new platforms and genres instead of fighting in the same backyard as everyone else.

Why are you funding it all out of your own pocket instead of seeking outside investment?

Relative to something like Evolution or DID, [Starship] is far smaller in size and turnover, but is able to generate 50-fold more revenue for a fraction of the cost or risk. I don't want to spend six to 12 months trying to explain something and get money, because that would be me falling into the broken system. It's me doing a show, and by the time I've explained it I could just make it. Then people will get it, and the floodgates will open. I'm so relaxed; I've got confidence in what we're achieving. And believe me: offers and opportunities and partnerships... we're fighting them off.

And you're turning them all down?

Part of our role is to create partnerships with some of the biggest brands and players in the world. We ultimately want to use some of their multimillion-pound marketing channels. We're not turning them down; it's just our choice, our terms. We're meeting the biggest players in

the world eye to eye. We're not looking at some parent-and-child relationship. We don't need to do publishing deals. We don't need to do anything.

Unlike Evo, which was a mechanical process, there's no [fixed] plan with Starship. We want to do it because we love what we're doing, and if any of the IPs become really sought after, then we'll all take a view on it; it's a democratic process with me and the team. We really tried to get the best of 1993 recreated at Starship: people come in and invent things every day and it feels great. I'm always wondering: is this folly, or genius? At the end of the day, I'll let the market decide. All we're going to do is try our best. I feel we're on the cusp of something big.

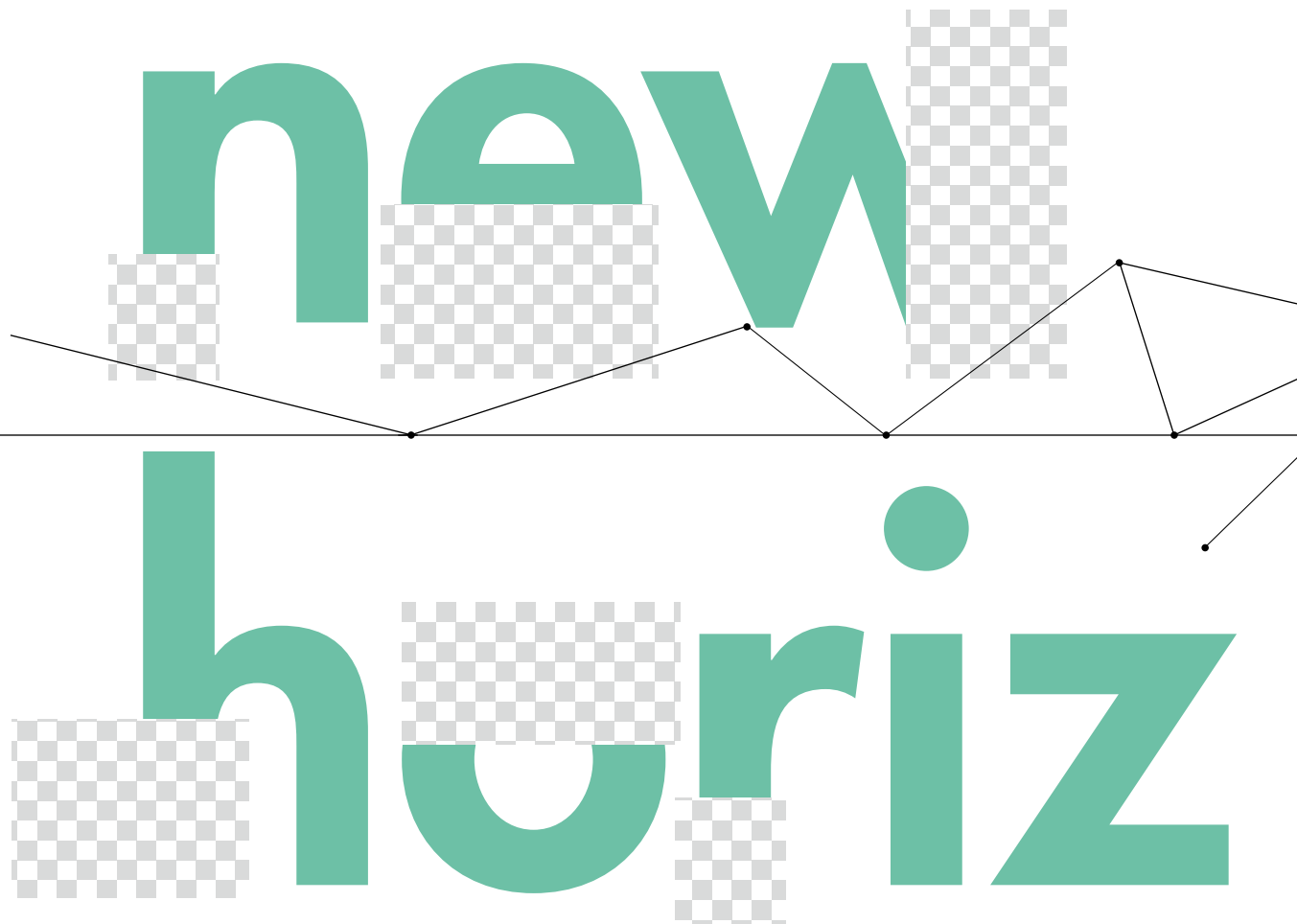
You were at E3 in June – your first in seven years. Did it give you pause for thought about what you're doing with Starship, or further convince you that you're doing the right thing?

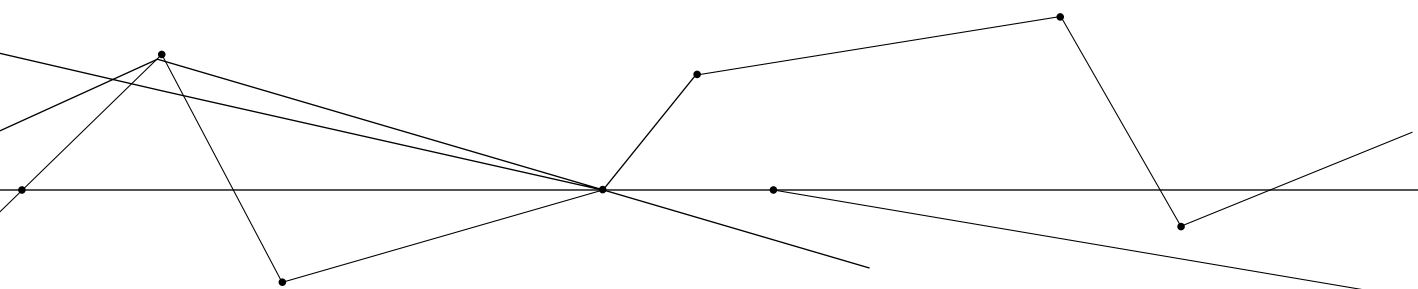
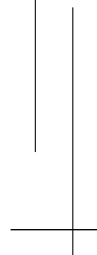
I felt like I'd only left [the industry] six months ago, I really did. From when I left, there's 40 times more processing power, but I wasn't seeing 40 times better product. It's not the fault of developers – what they've done is brilliant and all that – but I just felt [only] the blood was better. Just better-quality blood. All I saw was a lot of violence, a lot of polarisation. I came away from a couple of the conferences feeling... I thought I'd be years behind, but I looked up and thought, 'You know what? I'm years ahead.' It was the best thing I ever did, taking time out. I could see why I felt I'd lost the love for the console sector. [There were] brilliant, world-class productions, but an awful lot of shooting games, an awful lot of blood, an awful lot of sci-fi. They're really missing an opportunity. E3 felt so much smaller: they didn't have all the other halls with all the little developers. Maybe it's a great place to announce the launch of a product, but it doesn't have the significance it once did. ■



Each of Starship's three apps is aimed at new or underserved markets. *CyberCook* is *Cooking Mama* for adults, with real-world recipe books; *Playworld* is for five-to-ten-year-olds; *Forget-Me-Not* is aimed at the grey market

new
horiz.





ons

A new wave of firstperson adventures is trading action for discovery. We talk to the pioneers of a genre to find out where it's headed next

By **ANTHONY AGNELLO**



Conflict lies at the heart of a great many videogames, but nowhere more so than in those that adopt a firstperson perspective. In the period between 1992's *Wolfenstein 3D* and 2014's *Wolfenstein: The New Order*, the word 'shooter' has become the natural partner for 'firstperson,' so successful has the genre been. But there's a growing counterculture of developers putting the emphasis on what you can do with an eye-level camera without tying it to the extensions of a vehicle or firearm.

"There's definitely a bit of a moment going on with these kinds of games," says The Fullbright Company's **Steve Gaynor**, designer of house-bound interactive mystery *Gone Home*. "There's a lot of games that gave us the confidence to make a game like *Gone Home*, games such as *Dear Esther*, and even *Amnesia* or *Portal*. There was this small movement of games before we came out that were starting to explore FPSes where they're shooting, but you're asking what else is going on."

Gaynor worked on one of the latter himself: *BioShock 2*'s *Minerva's Den*

DLC. "We saw isolated examples that could be expanded on," he says. "That's where *Gone Home* came from. We played a bunch of games based on environmental storytelling with audio diaries and stuff as a side activity, as a small support structure for the core loops of combat and levelling up, and we were like, 'Well, what if that was the whole game?' We see people saying the first hour of *BioShock Infinite* was their favourite game in recent memory before the combat started. That has to build up before people say, 'All right, what if the first hour of *BioShock Infinite* was the whole game? How do we make that interesting? How do we invest additional mechanics into making that the thing that you do, not just the prelude to an FPS?"

"WHAT IF THE FIRST HOUR OF BIOSHOCK INFINITE WAS THE WHOLE GAME? HOW DO WE MAKE THAT INTERESTING?"

Gone Home is just one of the firstperson adventure games from the past year that has attracted critical acclaim — and a tsunami of Internet scorn — for embracing the design extremes touched on by post-*Portal* experiments such as *Dear Esther*. *Gone Home* strips away firstperson norms, eschewing fighting, shooting and taxing environmental puzzles. It doesn't even have the idiosyncratic, multistep puzzle solving of point-and-click adventures. And it isn't the only game seeking to chart this space.

While Fullbright was hard at work on *Gone Home*, Galactic Café was

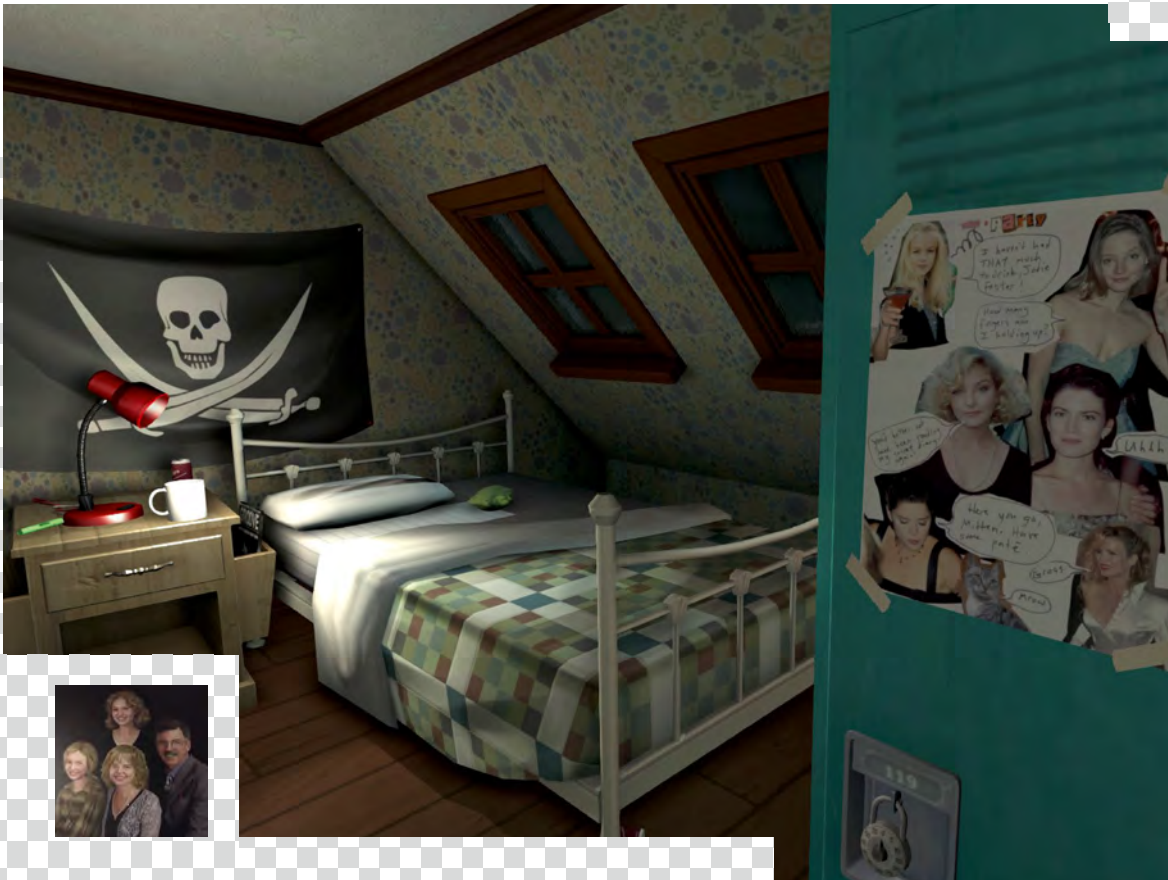
finishing up *The Stanley Parable*, a surreal and self-aware adventure that shares the same conflict-free structure as *Gone Home*. White Paper Games, meanwhile, skipped the human drama of *Gone Home* and the Dadaist musing of *The Stanley Parable*, building its own actionless adventure in *Ether One*, an impressionist tale about living with dementia. Released within six months of each other — while the major FPS machines at Activision and Electronic Arts revved up for a new console generation — these games represent a relatively new avenue for creators. Vekla's *The Witness*, The Chinese Room's *Everybody's Gone To The Rapture* and Storm In A Teacup's *Nero* pave the way for some of this actionless genre's next steps.

In place of action, these games share a set of defining characteristics. They're all mysteries solved through observation and slight manipulation of the environment. You might pick up a key or a lantern, or press a button to reveal more space. They're also all lonely experiences, largely devoid of other characters. Yet despite these shared features, it's hard to say what this burgeoning genre should be named.

"Firstperson narrative exploration game?" suggests one of the primary masterminds behind *The Stanley Parable*, **William Pugh**. "I don't know. I know that we certainly



FROM TOP **Steve Gaynor**, writer and designer of *Gone Home*; **William Pugh**, writer and designer of *The Stanley Parable*



TOP *Gone Home*'s Greenbriar mansion is overfull with conflicts both real and implied, but not a single one requires stealth kills or headshots.

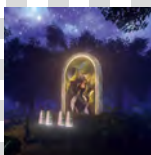
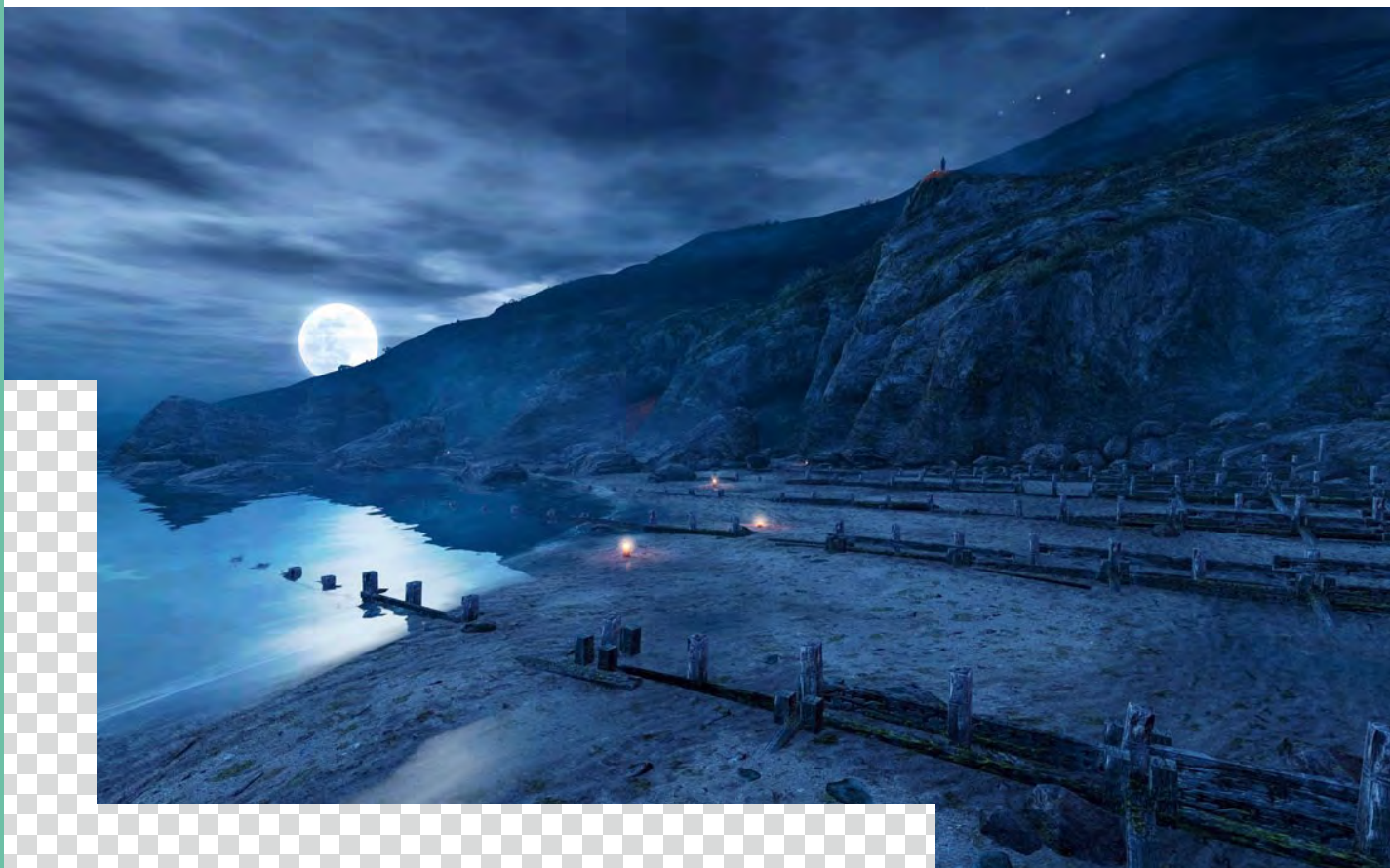
RIGHT *The Stanley Parable* asks the player to make seemingly the most passive of decisions – go right when told to go left – but these small, docile actions lead down an array of existentially harrowing paths



FROM THE SOURCE

Dear Esther shares crucial history with *The Stanley Parable* – both games were born as *Half-Life 2* mods. The ease of use, low cost and accessibility of Valve's ageing but versatile engine has played a significant role in games like these being made.

"You've got the Unreal Engine, CryEngine, Unity and Source," says White Paper Games' Pete Bottomley, reflecting on the tools available to designers looking to build a 3D game. There are plenty of options, each with their merits, but Source is unusually rich with finished games ready to be modded, which makes experimenting with ideas far easier. "You've got Unreal and, yes, you can mod it in software and stuff like that, but the thing about the Source engine is it comes with the *Half-Life*-style game design approach and so there's very much an emphasis on storytelling. It's already got those kinds of elements in there that allow you to create a narrative-driven game."



"GONE HOME IS THE WAY IT IS BECAUSE THEY DIDN'T HAVE THE RESOURCES TO DO ANYTHING WITH CHARACTERS"

TOP *Dear Esther's* haunting coastline is a realisation of the promise glimpsed beneath the surface of the Source-powered game that served as its foundation.

RIGHT *Ether One's* Restorers work in an office that's the ideal home for boxes of ammo and health packs, but the familiar hi-tech setting is just a gateway to the fractured minds they're trying to fix



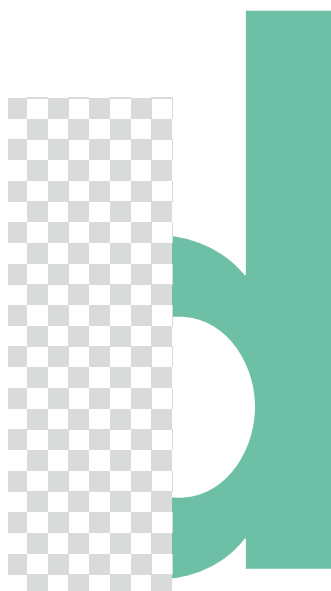
didn't create this seeing a genre emerging and thinking we could do something within that. The game very much emerged from limitations we had when designing it, and I guess that's why you see so many independent studios doing this sort of stuff, possibly, rather than people with more money to spend on AI and mechanics."

In *The Stanley Parable*, you control an office worker who finds his workplace suddenly abandoned. A narrator explains Stanley's actions before you act them out, but you're regularly presented with the chance to defy the script, resulting in drastically different endings and storylines. Follow the narrator's path, and you may find a depressing dissertation on the banality of fantasy. Try to spice things up by jumping from a stock-room elevator to a hallway below, though, and you'll be treated to a teardown of the average player's ceaseless need for competition and thrills. The narrator even plops a leaderboard into the game and lets you press a big red button, saying such focus-grouped features make *Parable* more marketable. These sequences are hilarious and rewarding as discoveries, but they also get to the heart of those limitations described by Pugh. They're mysterious and lonely, partly because they have to be.

"*Gone Home* is the way that it is because they just literally didn't have the resources to do anything with characters," Pugh's partner and the creator of the original Source engine mod version of *The Stanley Parable*, **Davey Wreden**, says. "For a lot of independent developers, you can go in a completely divergent direction and pull it off as opposed to doing what the big developers are doing, and it never even succeeds. If we had a big budget, I guess we would have had NPCs and we would have had the freedom to make more choices, but those might not have been good choices."

WHEN A GAME ISN'T A GAME

"When Steam launched its tagging mechanism so you could add tags to games, we ended up in the 'Not a Game' category," says Gaynor, annoyed but also with a sense of humour about the public backlash against this breed of firstperson adventure. For as much critical and sales success as these games have enjoyed, they've drawn an equal amount of hate. Why all the fuss? "It's threatening, right?" says *Gone Home* co-writer and artist Karla Zimonja. "People have spent how many decades or years learning how the normal games work and all of a sudden it's not applicable, and 'God! It's [not] about winning, and it's about women, and I hate that!' But you know, there's so many cool places you can put challenge in games. We chose to put it chiefly in comprehension and understanding, and that is not where a lot of games put it, so [*Gone Home* is] unfamiliar, strange and threatening."



ear Esther has sold well over 750,000 copies, *Gone Home* sold 250,000 copies over its first four months, while *The Stanley Parable* sold more than 100,000 copies in its first week. *Ether One*, released in March 2014, has reviewed well with the majority of critics, with a score of 81 on Metacritic. The secret to success is specificity, according to White Paper Games developer **Pete Bottomley**.

"You're not trying to cater to everyone, [and] I think that's really important," he says. "We asked, 'What's the genre? What's your intended audience?' All the general questions. We just kind of made what we wanted to play and then we put it out there. All of the triple-A games have to sell millions of copies, so they've got to appeal to quite a lot of people. The reaction's never going to be as [polarised] as 'This is a real interesting experience' at one end versus 'This is a walking simulator' at the other."

Putting you in the role of a Restorer, someone who dives into the mind of dementia sufferers and attempts to fix their minds, *Ether One* is more active than many of its peers. Items such as a lantern have to be used in puzzles to unveil more of the story,



Davey Wreden, creator, *The Stanley Parable*

but most of these puzzles can be skipped entirely and don't require any bold interactions. Rather than the domestic landscape of *Gone Home* or the preposterous, shifting office of *The Stanley Parable*, *Ether One* switches between environments meant to evoke a dementia patient's mental landscape, moving between a sterile clinic setting, a forbiddingly drab series of industrial locales, and a technicolour cel-shaded world called Pinwheel. *Ether One* treads that fine line between what Internet pundits have lambasted as 'walking simulators' and something that is still recognisably a traditional game with obstacles to overcome.

"It's hard when you're dealing with subject matter such as dementia, because you want it to be a serious game, but you don't want it to be a serious game that's dry," says Bottomley. "We tried to always tie back into dementia, but as far as pacing goes, we still wanted those, you know, 'triple-A-style' experiences. We have a co-narrative that sets the overall pace for the game: collecting ribbons. It makes 70 per cent of the game optional. It was a difficult decision, I'll tell you that, because it's very game-y, that mechanic, but that was the best ►

BIGGER EQUALS BETTER?

The economic and manpower realities of independent development are in part responsible for these actionless adventure games. They're cheaper to make than a game with tons of 3D characters fighting in complex worlds, for instance, and the lack of the corporate structure necessary to make large-scale productions generally allows more room for the forms of personal expression that colour these stories. Steve Gaynor notes that some publishers have already noticed potential in the style, though. "I'm really looking forward to *Alien: Isolation*," he says. Made by Creative Assembly, it's a game that's "really focused on being at least combat light, you know, if not totally combat-free." But Wreden doesn't believe the genre's distinctive flavour will be retained in the hands of the bigger publishers. "By the time you get up to that level, [the genre's] so commonplace that it's not even notable, right? You're not going to get Ubisoft putting \$100 million into a combat-less game until the culture and market is already so saturated with actionless games that it's a safe bet. By the time this is happening a lot, then who cares? We've got a lot of games, so it's not like we need Ubisoft making another."

way that we could set the tone and the pace of the game."

"With our game, it's all about the interaction with this other entity, the narrator," Pugh says, attempting to pin down *The Stanley Parable*'s appeal. "A kind of satisfaction comes from a conversation between the player and the game. The gameplay takes place within your mind rather than in the game. We do it a bit in the sense that the player has to kind of work out what this system is that they're inside of."

While *The Stanley Parable*'s authorial control is clear, the designers of *Ether One* and *Gone Home* prefer to maintain the integrity of the fourth wall. "It was a good idea to primarily have the house be behaving like a house would in the real world," Fullbright artist **Karla Zimonja** says. "We didn't really want it to be like, 'I went to Disneyland and I went into the Ghost House, and there's things happening every time I step around the corner.' If you got too tricky with the reactions to the players' behaviour, it started feeling very constructed and it didn't feel good."

"Our intent was to have as light a touch as possible and only intervene as the designer as the presence of the person that built the game in very specific circumstances," Gaynor says. "We wanted to approach a sink as a sink. You can turn on a sink and turn it off because you can [in real life]. Similarly, we do not put down trigger volumes that say, 'Lightning flash one happens when you walk through door A.' It's more like lightning and thunder could be out there just happening any time and its unpredictable the way that nature is unpredictable."

Crucial to the success of all these games is freeing the player to explore

unimpeded. Free of all but the most limited guides and tutorials, these actionless adventures thrive on trust. "I don't think that you can respect your player enough," Wreden says. "You have to imagine that they actually will go off and want to do work on their own to unravel this thing that you've created, that they're



"ALLOWING STUFF TO BE HIDDEN - THAT GOES A LOT OF THE WAY TOWARD CULTIVATING RESPECT WITH PLAYERS"

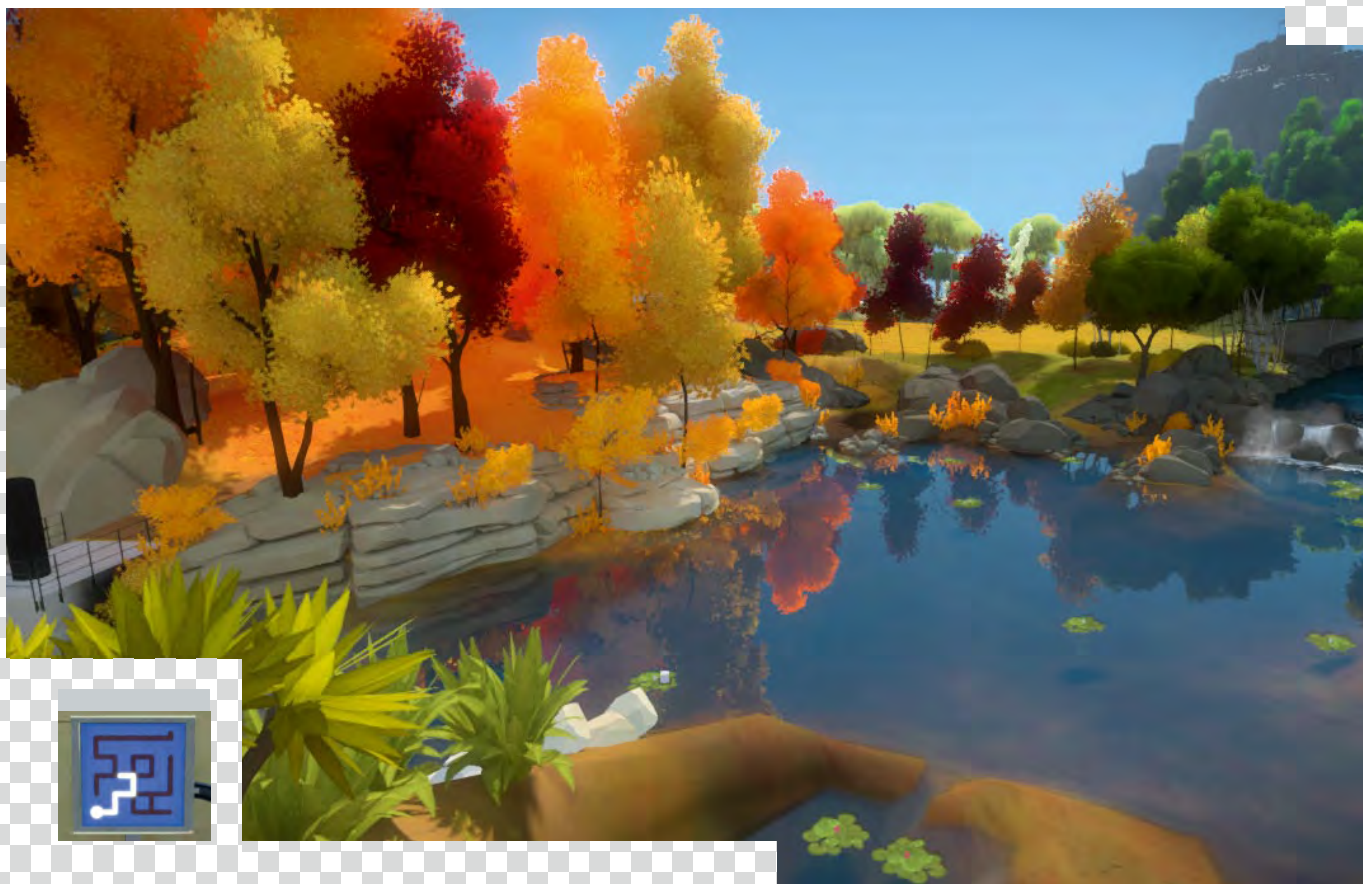
willing to go the distance. At the same time, it's really hard to do all of this work and then just leave people hanging, to not resolve something, or to risk that a lot of people just won't find something that you've spent a lot of time on. Allowing stuff to be hidden — that goes a lot of the way toward cultivating respect with your players to where they feel they're engaged. [I believe] that you as a player are smart enough to both want to do that and to be able to actually make the actions on your own."

The question now is how the actionless firstperson adventure evolves. Vekla's *The Witness* looks

to further explore the ideas shared by these games, but over a significantly longer runtime. *Gone Home*, *The Stanley Parable* and *Ether One* are all brief experiences — just a few hours long to complete in their entirety — while Vekla's Jonathan Blow has said his team has found *The Witness* to take 25–40 hours to finish. Whether the mainstream blockbuster publishing machine embraces this style depends partly on its success, on whether such games can be made into longer experiences players are inclined to spend larger sums of money on.

"I want to see more different, interesting things happening in all sections of the industry," Gaynor says. "I think it would be really fascinating to see what happened if a game with a full triple-A budget gave themselves those same constraints: like, there's no attacking in this game

whatsoever. I really liked what Naughty Dog did with the non-combat sections of *The Last Of Us* DLC where Ellie and Riley were running around together, letting the player's play be about character building and a deeper understanding of the world... not as a means to killing zombies. But it could also be done badly, you know? There's a reason *Gone Home* is only three hours long. We don't know if a 20-hour game works in this format and I don't know necessarily what you would add to it to make it stand alone. I don't know if that can sustain an entire production, but it'll be an interesting thing to see." ■



Jonathan Blow built his reputation on a game that warped the fundamentals of *Super Mario Bros.*, but it still had you stomping on enemies. His next game, *The Witness* (pictured), trades even the soft action of *Braid* for the peaceable exploration of peers like *Gone Home* as well as the pastoral psychedelia of *Ether One*



THE MAKING OF...



YAKUZA

Sex, violence and targeted marketing: how
Sega created a blockbuster just for Japan

By DANIEL ROBSON

Format PlayStation 2
Publisher/developer
Sega
Origin Japan
Release 2005

Until 2005, the dark underworld of the yakuza had been explored best in film. The likes of Takeshi Kitano, Teruo Ishii and Takashi Miike brought us drama from the world of Japanese organised crime with tales full of murder and revenge, honour and humility, blood and violence. Then came *Ryu Ga Gotoku* – released overseas simply as *Yakuza* – the game that made even the most sprawling cinematic epic seem shallow.

Placing players in the immaculate shoes of sharply dressed protagonist Kazuma Kiryu, freshly returned to Tokyo after spending ten years in jail for someone else's crime, *Yakuza* offers a world of money, violence, dubious sexual politics and urban grit. The streets of fictional district Kamurocho – obviously, if unofficially, based on the red-light district of Kabukicho – bustle with wannabe gangsters, while its loan-shark businesses, hostess clubs and game arcades become the playground setting for a debauched tale enacted with remarkable cutscenes.

Going firmly against the wisdom of the times, *Yakuza* was made to appeal not to the widest possible audience, but to a small one. "I wanted to make something that sharply pinpointed a specific target market," producer **Toshihiro Nagoshi** says. "That's where the idea started, as a game that would speak to Japanese consumers. It had to have a very identifiable motif of Japanese drama – an action adventure, with battle elements and fighting, and a dramatic world. There were lots of mafia and gang games already, but the yakuza was the ideal motif."

Production began in 2003. Nagoshi had previously been deployed across several Sega titles, with *Super Monkey Ball* his main gig immediately before *Yakuza*, a charming juxtaposition that barely raises a smirk when we mention it to him. He had also worked as a supervisor on *Shenmue*, with which *Yakuza* shares gameplay and aesthetic DNA. His collaborator was producer **Masayoshi Kikuchi**, best known at that time for helping guide the troubled *Panzer Dragoon Saga* to completion.

The pair's biggest challenge was to bring Kamurocho to life. They and their team spent several nights a week partying in Kabukicho, visiting bars, restaurants and hostess clubs to drink in the atmosphere (and the drinks). Nagoshi refuses to divulge how much of the game's relatively large ¥2.4 billion (£14 million) reported budget was spent on this phase of



Yakuza's core battle system has remained to this day. Combat plays out in instanced areas, allowing for extra detail and plentiful items making for improvised weapons

development, and he carefully avoids referring to Kabukicho by name, but the fruits of the team's long, hard nights are there for all to see in *Yakuza's* immersive semi-open world.

"I wanted it to be just like the real place," Nagoshi says. "We went down there and took in the area with our own eyes, took photos and did research so we could build a simulation."

THE CHANCE TO FREELY EXPLORE A FICTIONALISED RED-LIGHT DISTRICT WAS A MAJOR PART OF YAKUZA'S SUCCESS

"It was fun, for sure, trying to figure out how to transfer all of that into a game," Kikuchi says. "There were all sorts of limitations, including the hardware specs and game design. So within those limitations, how could we best express this real environment? It was fun to exercise the team's brains with that challenge." One way was by implementing the series' signature play spots, which are abundant even in the first game.

Batting cages, UFO catchers, casino games, pachislot: Kamurocho was alive with hours of distractions. "We wanted it to not only look like a city but to feel like one, too," says Kikuchi, "[a place] where you can play, eat and drink."

"The field itself is small, especially when compared with western open-world games, but it's densely populated and it's deep," Nagoshi says. He adds that the chance to freely explore a fictionalised red-light district was a major part of

the game's success, and indeed Kamurocho may be *Yakuza's* strongest character. Anyone who has visited Kabukicho or its equivalents in Osaka, Sapporo, Nagoya or just about any major Japanese city will recognise the seedy but vibrant atmosphere of a district run by the underworld for the pleasure of the everyman. Kamurocho's streets make for a charismatic and realistic stage on which *Yakuza's* intriguing story plays out, with ¥10 billion in missing Tojo Clan money at the heart of a suspenseful power struggle.

If Kamurocho is *Yakuza's* strongest character, then Kiryu himself isn't far behind. The archetypal antihero, he is a man of conscience and generosity but with a brutal streak and a thirst for vengeance. He is joined by a diverse and colourful cast: psychopathic 'Mad Dog of the Shimano Family' Goro Majima; innocent young orphan Haruka Sawamura, who unwittingly holds the key to the stolen mob money; and many other memorable characters, who would return for later games.

"The only reason the characters have resonated so strongly with the public is because the game sold so well," Nagoshi shrugs, ever the contrarian. "The reason the game sold well is for the reason I said earlier: it was a carefully targeted type of game that didn't exist previously. The characters have nothing to do with it. The characters were born of the storyline; that's where it all starts. As you hone the storyline, you realise you need this or that type of character, and then you rewrite the story with them there, and just keep refining it."

Yakuza's cutscenes are numerous, giving *Metal Gear Solid* a run for its money in terms of suspense, visual quality, acting and sheer endurance-testing length. Unrestricted by the two-hour runtime of a movie, they take the player deeper into the criminal hive than Kitano et al could ever accomplish in a single movie. Expertly framed with cutting-edge 3D models, they still hold up today.

Nagoshi says that the strength of the story elements is in large part thanks to that lavish budget: "If we'd made it with a low budget, it would have looked cheap." The main story was written in collaboration with crime novelist Hase Seishu. "I wanted to reflect both the real world and a fantasy world," Nagoshi says. "If it was too realistic, it would have been boring; the story seems as though it might be possible in ►

THE MAKING OF...

the real world, but it's also fantastical. That balance was important, and it's the way we still make the *Yakuza* games."

The final crucial piece of the puzzle was the game's combat system. With combo sets that evolve as you level up, the graphically violent fights are welcoming to button-mashers but also offer complexity for those who want it. In Kiryu's hands, everyday objects become weapons – bottles, dustbins, even bicycles can be smashed with satisfying heft into the face of an opponent.

"Real-world objects communicate pain much better, don't you think?" Kikuchi observes. "You have no idea how it would feel to be stabbed with a katana, but you can easily imagine the pain of being lamped with a crystal ashtray. You know roughly how heavy a bicycle is, so you can guess how it would feel to be hit with one."

That said, almost every altercation ends with the defeated party scurrying away, still very much alive despite the ferocious finishing moves dealt via QTEs at the end of special combos. Kikuchi says this was partly with the game's rating in mind – even with such concessions, it was released in Japan as CERO D (over 17), and in the UK as an 18 – but Nagoshi says it was also a question of taste. Players might kill hundreds of enemies in *Call Of Duty*, but Nagoshi "didn't think it was particularly important in a piece of entertainment to have lots of death and killing".

The game's development ran smoothly, despite many of the team being new to the PS2 hardware. Indeed, the *Yakuza* engine would form the basis of the many sequels and spinoffs that followed on PS3, PS4, PSP and Vita, with a series of improvements and upgrades rather than a major overhaul. The black crossfade screen as Kiryu enters a battle may have been born of hardware limitations, but it's become one of the series' motifs, deployed in 2012's *Yakuza 5* despite having become technically unnecessary.

Yakuza was released on December 8, 2005, in Japan and sold 232,650 units by the end of the month; it has since accrued around 1 million sales globally. How to promote the game was as challenging as its development, Nagoshi recalls.

"The difficult part was the marketing – how to explain to the media what the game was about and why we'd wanted to make a game like that without spoiling all the surprises," he says. "I gave that a great deal of thought all the way through development, because I knew it would be

Q&A

Toshihiro Nagoshi
Yakuza producer and head
of Ryu Ga Gotoku Studio

Did you expect *Yakuza* to become a series?

I hoped it would, but of course if the sales had been no good then it would have been over. That's entertainment. I had a few vague ideas of what I would like to do in a sequel, but mainly I was focused on making a good game. The sequel was decided very soon after the sales figures came out for the first game.

Tie-ups with real-world brands and shops such as Suntory whisky and Don Quijote department stores have become a series staple. Where did the idea come from?

If you're going to create an immersive environment based on a real place, then the more real-world locations and brands the better, so I wanted as much of that as possible. These days, the series is a hit, so it's easy to negotiate these tie-ups, but at the start no one knew what kind of game we were making, so it was difficult to explain. Most companies turned us down.

The immersion and freedom of the game often draw comparisons with *Shenmue*, which you also worked on.

That's simply because both games are set in modern-day Japan. I don't think there's any other reason. Maybe there are just too few games like that.

How close was the finished game to your original vision?

I had a general vision of how the drama and battle parts should be, but it was the staff who actually filled in the blanks and fleshed it out into a proper game. I think the final game was better than I'd hoped.

important. Still, the marketing budget was huge compared with other games and even with the development budget. I'm sure that was part of the reason the game was successful."

Yakuza is now a major blockbuster series in Japan, with each new game accompanied by a barrage of tie-ups with real-world celebrities and restaurant chains. Each year at Tokyo Game Show, Sega's booth is dominated by a large *Yakuza* area, with fans clamouring to see booth girls dressed as hostesses and guys toting katana, while the cosplay area is filled with fans posing as their favourite characters from the series, many of them women crossplaying as Kiryu, Majima



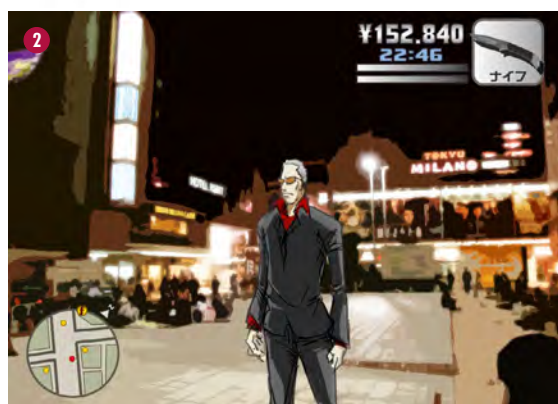
and other male characters. Perhaps the key is that, belying its budget and grand scale, *Yakuza* offers a surprisingly personal experience.

And despite Nagoshi's intention to create a game tailored to Japanese tastes, *Yakuza* also found unexpected success in the west. Maybe its exoticism lends it its charm, offering a glimpse of the underbelly of an everyday world that is not so everyday to outsiders. Although later games in the series would come with subtitles, the first game is fully localised with English voice acting, at Sony's stipulation. Majima was voiced by Mark Hamill, while Michael Madsen voiced Shimano Family leader Futo Shimano. In the west, the cultural divide saw the game attract accusations of misogyny for its portrayal of hostesses as objects of desire, with many assuming incorrectly that the hostesses are prostitutes. Kikuchi brushes off the criticisms. "Hostess clubs are something that do exist in real Japanese towns, so I don't see it as a derogatory thing [that they're in the game]. If you don't already know what a hostess club is, just play the game – that will give you a pretty realistic impression."

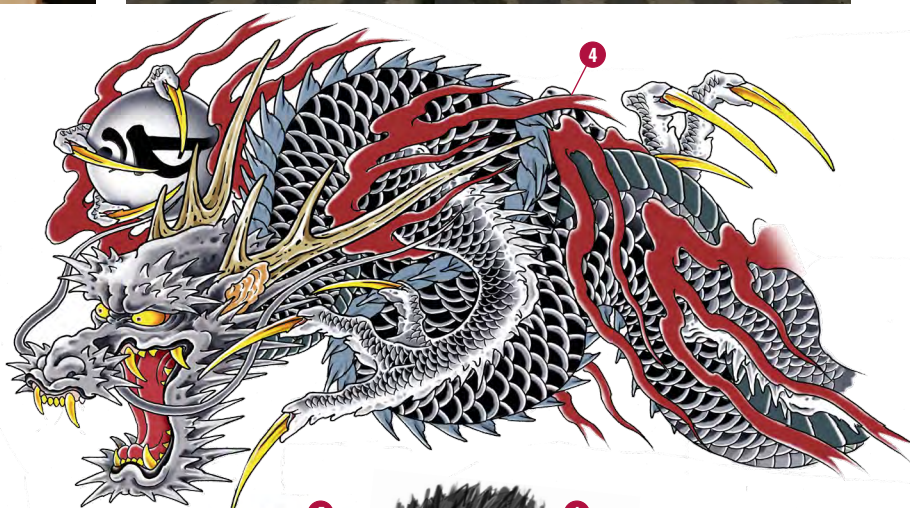
In Japan, a sequel was greenlit within a month of *Yakuza's* release, and Takashi Miike directed a 2007 film adaptation, *Ryu Ga Gotoku Gekijoban* (titled *Yakuza: Like A Dragon* overseas), bringing the concept full circle. "I didn't expect the film to be like the game, because games are games and films are films; so as long as the film was good and it reflected the game by about 20 per cent, that was fine," Nagoshi says. "Miike has a similar style to the *Yakuza* games, and I think you can tell from what's on the screen that he enjoyed making it."

Yakuza got a HD overhaul as part of the *Yakuza 1 & 2 HD Edition* released on PS3 in 2012, making the entire series and most of the spinoffs playable on PS3. And, for the first and only time in the series' history, in 2013 the remakes were released on a non-Sony platform: Wii U. If Nintendo hardware sounds like an unlikely home for a game as violent as *Yakuza*, well, that might explain the poor sales.

When asked what he would have done differently given the chance to go back and make *Yakuza* again, Nagoshi replies: "Nothing at all. We pushed it as far as we could back then; there's no further we could have gone." The awards littering the sizeable private office of a man who boldly seized a gap in the market suggest that he might be right. ■



- 1 Yakuza's gratifying fights blend together violence and humour, powered by a control system that appeals to players of all stripes.
- 2 Early concept art demonstrated Yakuza's GTA-inspired HUD and stressed the sheer size of the player character onscreen.
- 3 The hustle and bustle of Kamurocho mirrors real-life entertainment and red-light district Kabukicho, an immersive and unusual setting for a game.
- 4 As its English title suggests, Yakuza mixes underworld fact and fiction to create a sordid world hallmarked by gritty fantasy.
- 5 Psychopathic gangster Goro Majima is a fan favourite.
- 6 Yakuza's enduring appeal is in part thanks to its characters, with lead protagonist Kazuma Kiryu as the archetypal gentleman rogue



STUDIO PROFILE

REDLYNX

The 13-year veteran development studio behind Trials has lost none of its youthful exuberance

By BEN MAXWELL



Unwavering dedication. That's all you need if you want to pull off an unblemished run on one of the *Trials* series' Extreme tracks. But with each inevitable failure you'll become a slightly better rider until, eventually, you find the perfect balance of technique and power. And if you speak to company CEO **Tero Virtala**, it's apparent that RedLynx approaches game development in much the same way.

"We have made over 100 games, in all types of genres and with all types of game mechanics," he tells us. "By trial and error, we just found out that we seem to be really good at developing physics models and creating designs that fit with those physics. We have the persistence to keep on polishing and tweaking and polishing and tweaking, accepting some errors and then going back and trying to redo it."

It's an approach that resulted in *Trials HD*, one of XBLA's most successful games. It was also the game that brought what was then a small Finnish studio to the world's attention, blending note-perfect riding physics with incredibly challenging tracks. But it was a nine-year journey before the studio found its niche.

Founded in 2000 as RedLynx Laboratories (itself spun out of Wah-Software, a studio set up in the '90s by RedLynx co-founders Antti Ilvessuo and his brother, Atte), the studio started as a work-for-hire studio specialising in Java games. Among its early releases, which included *Micro Rowing* and *Micro Boxing*, was a simplistic stunt bike game called *Trials*. Among its numerous other projects, that game has been iterated on many times over the company's 13-year lifespan, the most recent entries being *Trials Fusion* and *Trials Frontier*, itself a mobile game (albeit a little bit more advanced than a Java app).

These days, RedLynx has around 100 employees, not including the Ubisoft studios it can now call on since it was acquired by the French publisher in 2011. There are two development teams (one focused on *Fusion* and the other on *Frontier*), a live operations team that deals with community feedback and technical issues, and an in-house quality control team. With between 15 to 20 people, depending on what's required at the time, the internal QC team can react faster than Ubisoft's own QC services. "In addition to our developers, we need to have people who really like *Trials* and just keep on playing the game and finding those details that have to be in order," Virtala explains.



Antti Ilvessuo (left), RedLynx's co-founder and creative director, and Justin Swan, lead game designer on *Frontier*



"I actually come from the game-testing world," *Trials Frontier* lead designer **Justin Swan** says.

"I was a developer and tester a while ago at Microsoft, so I've always valued testing very highly. I've worked at different studios that handle things in different ways. I was at PopCap before here, and they didn't have much of an internal QC studio – a couple of people. Having our test guys in the room over there is great. You've got the guy in all the meetings who's stressed out about the bugs, and that's a good thing

"WHEN YOU SEE THE CO-FOUNDER WRESTLING, MAYBE YOU'RE GETTING LESS DONE, BUT YOU'RE CHILLING OUT A BIT"

sometimes, especially from a design perspective. I just want to go willy-nilly crazy, but I need the guy who says, 'This is going to cause a few bugs and it's never going to get tested in time.'"

While the company has expanded from a handful of friends to a 100-person Ubisoft subsidiary, the studio culture and ambition established in those early days remains at the heart of the company. "I think there are a lot of similarities between the company at the beginning and what it has become," Virtala says. "Part of it naturally comes from the fact that, when I consider us being 20 people a long time ago, actually ten to 15 of those people still work here. So they actually formed the core of the company back then and, of course, the early employees who have been here for over ten years, they create some of the habits and how we behave in those early phases without even noticing.

"I'd say that's a lot of crazy humour, innovation, openness and being very frank, and I think that's been one of the reasons why we haven't had to impose those types of values that

many other companies need to, because they have existed from the start. To always challenge yourself, always try to create games that would be different. It's easy to come up with designs, but the really innovative parts are actually created when you give freedom to the people who are developing something."

That freedom and "crazy humour" is aptly demonstrated when creative director Ilvessuo bursts into the room at considerable speed sitting astride a micro trials bike – one of two displayed in reception – to say hello. On a previous visit, we were lured into the studio's wrestling room by the creative director and physically attacked. "Yeah. I sit right next to him,"

says Swan. "I'm the main buffer between him and the real world, mostly. It's been... interesting. I had to get very large headphones at one point during crunch time, otherwise nothing was getting shipped!"

But Ilvessuo's ineffable personality represents, in Swan's opinion, RedLynx's unique way of doing things. "When you see the co-founder and one of the biggest people in the company riding a little motorcycle around, wrestling people to the ground and having a good time, maybe you're getting less work done, but you're chilling out a bit and coming up with some crazy stuff. The culture is super-open; it's amazing how open it still is, even after the Ubisoft acquisition. We've been able to maintain who we are, our identity and things like that."

Ilvessuo remains modest when we put Swan's assertions to him, but agrees that RedLynx is built on freedom. "Take, for example, the three [optional] challenges on each *Trials Fusion* track," he says. "It's not like I or some other lead designer decreed, 'These are the challenges



Founded 2000 (as Red Lynx Laboratories)

Employees 100

Key staff Tero Virtala (CEO), Antti Ilvessuo (co-founder and creative director), Justin Swan (lead game designer)

URL www.redlynx.com

Selected softography *Pathway To Glory*, *DrawRace*, *Trials HD*, *MotoHeroz*, *Trials Evolution*, *Trials Frontier*, *Trials Fusion*

STUDIO PROFILE



RedLynx's current offices wrap around an open well in the centre of the building, which makes them perfect for riding laps on the studio's selection of scooters and motorbikes

you must do.' We have eight really good guys who were given freedom to invent stuff, make them amazing – and that shows in the game when you play it. We don't have people who sit there and are 'creative Gods'. *Everyone* can be creative in their own work, and I think that's the really big part of RedLynx."

Swan also believes Ilvessuo is the driving force behind RedLynx's culture of obsessive polishing, which while not always applied in enough coats to every element of its games, has ensured that the studio is peerless when it comes to physics-based gameplay. "Where it comes from is definitely Antti," Swan says. "He's like, 'Why isn't this right, right now?' It's such a no-bullshit thing from him, which is really great. He really pushes a lot of that. It can cause a lot of friction when you're trying to get a game shipped; whenever he shows up over your shoulder and says, 'Why is that like that? It's stupid,' And you think, 'Yeah it is stupid,' and you have to change it. The perfection thing comes from the culture, top down, which is what Antti is providing, [and from] really good hiring."

"You can guarantee that the studios that are making really polished games, they are super passionate, they have great leadership, leaders on the team who are making something they're proud of. We've had teary-eyed moments talking about the game releasing, and nice things people have said about it. At the same time when you have things like 5/10 reviews coming out and they only want to talk about the free-to-play component, that's hard."

Edge's 5/10 *Frontier* review found problems with more than just the business model, but we certainly found the game's free-to-play element overbearing. Any internal upset over the game's widely negative critical reception would have been mitigated, we imagine, by the six million

downloads it enjoyed in its first week – a record opening seven days for a Ubisoft mobile game.

"We all knew what we were stepping into with [*Frontier*]," says Swan. "First off we had a hardcore game, traditionally for a hardcore gamer, and we turned it into free-to-play. There was no way we could get away with that without some critical backlash. We all knew that. We said, 'Don't expect this to be nothing but sunshine and rainbows when we ship it.' It doesn't matter how good a free-to-play game [it is]... you even have *Hearthstone* getting grief for its free-to-play mechanics. If people are going to complain about that game, there's no winning."

It's fair to say that RedLynx would have faced

Virtala says that each time one of these *Trials* clones was released, the studio would be bombarded with requests from series fans for an official mobile game. "They weren't able to explain what was wrong with these other games, but when we played them, we knew it," he says. "The physics model wasn't polished enough. If you played the game on a harder level, and you made a mistake, it felt frustrating – but you didn't think it was *your* fault; you thought there was something wrong with the game."

The problem of player frustration, even in the face of apparently insurmountable challenge, is one avoided by Ilvessuo's design philosophy. "Personally, I don't like the kind of game design

EACH TIME A TRIALS CLONE WAS RELEASED, THE STUDIO WOULD BE BOMBARDED WITH REQUESTS FOR AN OFFICIAL MOBILE GAME

less cynicism if *Frontier* didn't carry the *Trials* brand, so why didn't the studio create something new instead? "It's a good question," says Swan. "It's a risky thing to do because we've all seen what can happen when you take a beloved and hardcore franchise and make it free-to-play and mobile. Look at *Dungeon Keeper* – that's the prime example of how badly that can go. I definitely think it was a risk, but it was partly because of the fact that *Trials* is so well-known, and I knew myself that I wanted a *Trials* game on my phone. I loved *Trials* on PC and on console, and I'm mostly doing my gaming on mobile now. And there are tons of *Trials* clones out there. I downloaded every single one, because I was psyched: 'Finally, *Trials* on my phone!' Then you load it up and it's like, 'Oh my gosh.' It's never right. The physics are never even close."

where you make the player overpowered but then punish them in some way for failure. Instead, I like to keep the game challenging but then help you – for example, in *Trials*, an obstacle might look impossible, but actually it's easier than it appears. You make a move, and you're like, 'I got it! I feel good.'"

If you've ever achieved a platinum medal in *Trials*, then, you have Ilvessuo's generosity of spirit to thank. And it is clear, too, that despite now being corporately owned, RedLynx has lost little, if any, of its non-conformist spirit over the years, and Ubisoft hasn't tried to stifle it. "It's crazy how much they let us keep doing," Swan says. "Of course, they're paying attention, but they're giving us a lot of rope to hang ourselves with – or bungee jump with. We have a lot of rope and we're going to do something with it." ■



- 1 *MotoHerzog* was originally released on Wii but has since made the leap to phones.
- 2 *DrawRace* lets players plan a racing line via a touchscreen.
- 3 *DrawRace2* adopted less stylised visuals than the original.
- 4 Although the series had existed on phones and PCs beforehand, 360 release *Trials HD* was its first big success.
- 5 *Pathway To Glory*, a turn-based tactical game for N-Gage, is considered a bit of a lost gem.
- 6 *Trials Evolution* followed three years after *Trials HD*.
- 7 Mobile outing *Trials Frontier* adopted a divisive F2P model.
- 8 *Trials Fusion* adds quad bikes and a trick mechanic called FMX.
- 9 *1000 Herzog* put a platforming spin on RedLynx's ragdoll physics.



PLAY

REVIEWS. PERSPECTIVES. INTERVIEWS. AND SOME NUMBERS

STILL PLAYING

Resogun PS4

We're addicted again. Housemarque has wiped *Resogun*'s scoreboards clean and excised an annoying level-one exploit – which allowed players to farm enemies for huge scores – with a free update that also introduces local co-op. *The Heroes* DLC, meanwhile, adds a new level and a brutally tough Survival mode. But despite all this temptation, we're still working on our Moonlight Butterfly ship in the new editor.

ZombiU Wii U

Nintendo's continued efforts to convince players (and shareholders) of the value of Wii U's GamePad inspired a trip back to Ubisoft's chilling apocalyptic London. The introduction of supernatural story elements still frustrates, and a co-op campaign – rather than the unbalanced multiplayer modes – wouldn't have gone amiss. But *ZombiU* still stands among the most creative uses of Wii U's controller to date.

Titanfall Xbox One

Titanfall's fourth patch rearranges players based on their skill and performance in previous games ten seconds before each map begins loading, instantly putting an end to the lopsided fights of the vanilla game and turning every battle into a close-fought affair. It's a transformative change barely mentioned amid talk of the new mode, Titan emblems and new Burn Cards, but it redefines the game and sets a high-water mark for competitive matchmaking.

REVIEWED THIS ISSUE

**104 Valiant Hearts:
The Great War**
360, PC, PS3, PS4, Xbox One

108 Divinity: Original Sin
PC

112 Shovel Knight
3DS, PC, Wii U

114 Pullblox World
Wii U

115 Road Not Taken
PC, PS4

116 Supernauts
iOS

117 1001 Spikes
360, 3DS, PC, PS4, Vita, Wii U, Xbox One



www.edge-online.com
Up-to-the-minute
reviews and previews



Explore the iPad
edition of Edge for
extra Play content

The unforgivable sin

When Double Fine pitched a point-and-click adventure on Kickstarter and reached its \$400,000 target in eight hours, it felt like a sea change for the industry. Here was a disruptive new funding option that could potentially spell the end of the big publishers' stranglehold, one that would set creatives free from the need to demonstrate to know-nothing bean counters why their ideas were worth taking to market. Overnight, everything had changed.

Two-and-a-half years on, that seems like a false dawn. Rather than make developers feel like they can do anything, Kickstarter has given them a means of trying to do exactly what Double Fine did: pitch a retread of a forgotten genre brought up to contemporary standards. There are outliers, but crowdfunding hasn't changed everything so much as wound the clock back a couple of decades.

At least the games are up to snuff. *Divinity: Original Sin* (p108) was pitched as a late-'90s RPG in 2014's clothes; that is what backers paid for, and what Larian Studios has given them. It's Larian's fastest-selling game, and it topped Steam's chart despite launching on the final day of the summer sale. With *Shovel Knight* (p112), Yacht Club Games doesn't exploit nostalgia so much as turn it into a mission statement. This is a game built within a reasonable approximation of NES hardware limitations. Some rules have been bent and others broken, but nostalgia has rarely felt so ambitious.

It should go without saying, however, that the most important thing a developer of a crowdfunded game has to do is keep its promises. Both *Divinity* and *Shovel Knight* have launched without their developers having met that most obvious of goals, though both will remedy the situation through updates (Double Fine did that first, too). But the more it happens, the less likely crowdfunding is to stick around.



Valiant Hearts: The Great War

Like war, *Valiant Hearts* begins with a few modest steps before escalating out of control. The game opens with Emile, one of four playable characters, walking through a French recruitment station, having been displaced from his farm and conscripted.

Over three screens, we're told the story of Emile's transformation from peasant to private as he arrives at the gates and is barked at by an officer, moves through a building having been stripped of his old clothes, and then emerges wearing a uniform and carrying a gun. It's a subtle but powerful opening. Later on, however, amid the ruins of a church, he fights a grenade-tossing German general in a blimp by buffeting the officer using the off-key parps emitted by an organ's broken pipes.

Valiant Hearts, then, isn't entirely sure what kind of game it wants to be. But even if such moments are tonally discrepant, they are at least neatly woven together from a mechanical standpoint. Despite its WWI setting, the majority of *Valiant Hearts* involves simple puzzles; manoeuvring a blimp into position so that you can knock a grenade from an enemy's hands is functionally no different from cooking wurst eintopf in enemy trenches as a prisoner of war. The message each puzzle delivers, however, and their effect on the player, is profoundly different.

It's a shame that the flights of fancy – which are mostly restricted to boss encounters – made the cut, because *Valiant Hearts* is at its best during its more intimate moments: being rescued from rubble by Walt, a German medic dog, and subsequently building a lasting friendship; helping out inmates around a POW camp in order to gather the equipment needed for a daring escape; or hiding from soldiers by cover of night, being careful not to move as flares light up the field.

Despite the action onscreen, you're rarely the perpetrator of violence, beyond the occasional shovel to the back of the head, as you move through Ubisoft's take on the war – grenades are mostly used to clear obstacles rather than kill. But violence and suffering surround you on all sides. Bodies litter no man's land and muddy trenches, soldiers cry out in fear, and chlorine gas fills the air. One particularly harrowing sequence sees you play as Belgian student Anna as she attends to the wounded, having volunteered as a field nurse. One man needs an arm removing, another requires a crutch, and another still needs a wooden cross to finish burying a dead soldier.

It's a sequence that's typical of the game's open, multilayered spaces, which allow you to move in and out of the screen between planes, and contain many smaller interconnected puzzles. The problems are never difficult to solve, and when you get one piece right the rest tends to cascade into place (the amputation saw also fells a tree that holds a billowing scarf that can be used as a sling). There are more localised puzzles, too,

Publisher/developer Ubisoft
(Montpellier)
Format 360, PC, PS3, PS4, Xbox One
Release Out now

It's a shame
that the flights
of fancy made
the cut, because
Valiant Hearts
is at its best
during intimate
moments



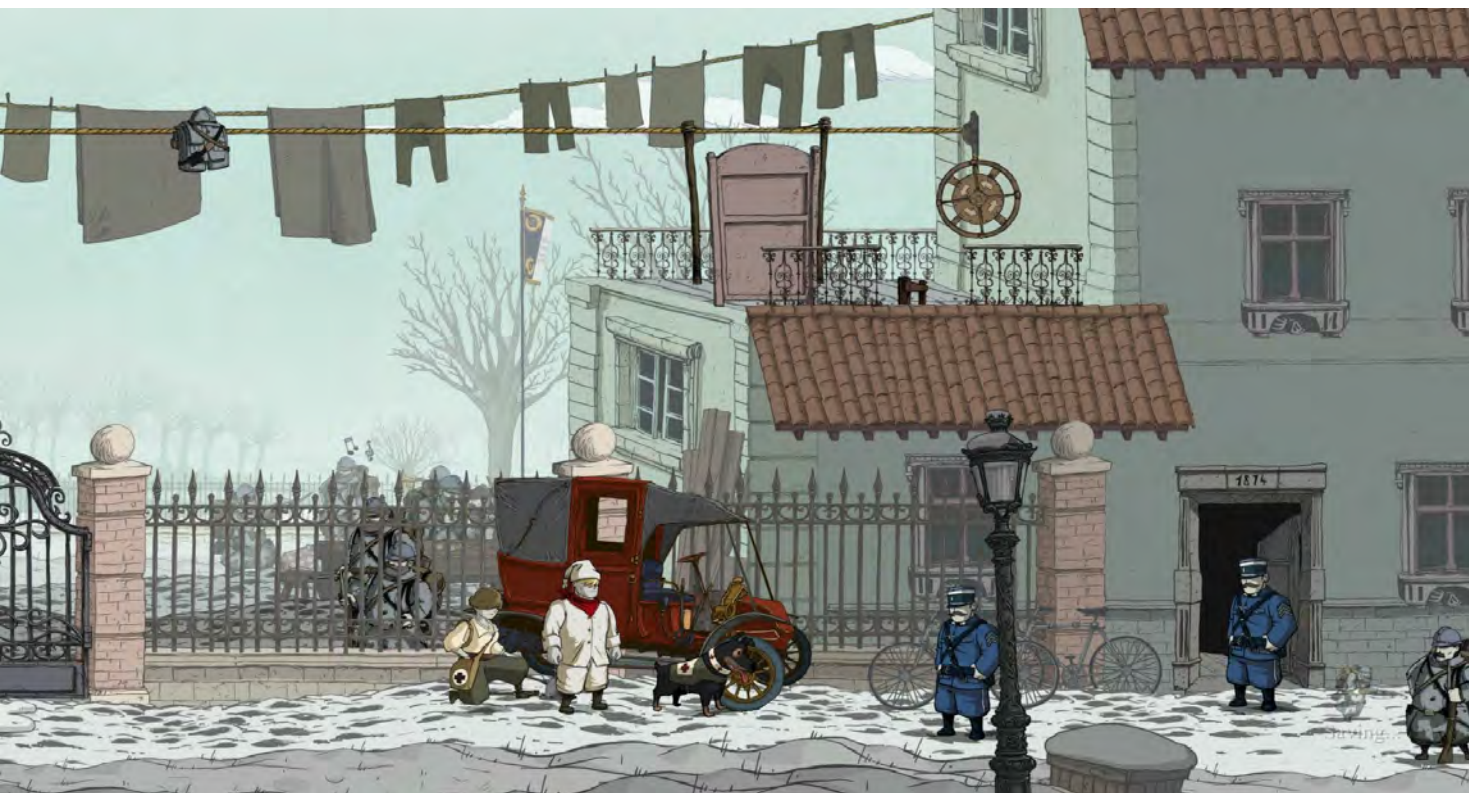
which take the shape of pipe systems with rotating connections that must be manipulated to allow liquids or gases to flow through them. Working out the bigger picture and correct order while exploring the atmospheric – and beautifully drawn – areas is satisfying despite the lack of challenge.

It's a pity, then, that Ubisoft falls foul of its inability to self-censor and introduces a rhythm-action-style minigame to represent Anna's medical activities. A bandage containing a simple cardiogram scrolls across the top of the screen and you must match button presses and combinations with each blip on the line. Miss these cues and the bandage will gradually become bloodier, eventually resulting in failure. It's a relatively inoffensive addition the first time you encounter it, but you'll spend a lot of time helping people as Anna – often multiple times in the same area – and it quickly becomes tedious. It feels like an unnecessary mechanic added for the sake of it, rather than something that gives variety to the game, and all the more so given that there is no consequence for failure and you're able to simply try again until you succeed.

Anna's other rhythm-action minigame, which sets several long-distance car journeys to music – the soundtrack including *Flight Of The Bumblebee* and *Offenbach's Infernal Galop* (better known as the music to the can-can) – is a more successful abstraction. Steering Anna's car left and right as it moves towards the player, planes, cars, tanks and even potholes attempt to impede your progress, all showing up in time with the music. These sections feel like poor relations to *Rayman Legends'* music levels, but they raise a smile nonetheless. Well, they do until a boss fight with a giant armoured car is shoehorned into one of them and things begin to drift from fact-based fiction to the simply fantastical. Worse, a couple of the armoured vehicle's attacks aren't adequately foreshadowed, leading to a cluster of frustrating deaths.

***Valiant Hearts'* other** playable characters aren't so reliant on gimmicks. Emile is sometimes armed, but more often finds himself with just a shovel, which allows him to open up escape routes during gas attacks and find buried collectables (all period objects that shed light on the era, such as makeshift gas masks made from whittled shell cases or urine-soaked cloth). Despite the game's story being told from multiple perspectives, it is Emile's journey that forms the central narrative.

Early on in the game, Emile befriends an American soldier, Freddie, who joined the French Foreign Legion in the early stages of the war. Whereas Emile was conscripted reluctantly, Freddie is seeking revenge against a German regiment that caused the death of his wife, and is a little more gung-ho as a result. He can hit harder, and also carries some useful wire cutters, but ►



ABOVE In this sequence, Karl must fool both the police and opposing army by acquiring several different uniforms in order to help Anna fix a broken wheel. These kinds of multilayered puzzles are common.

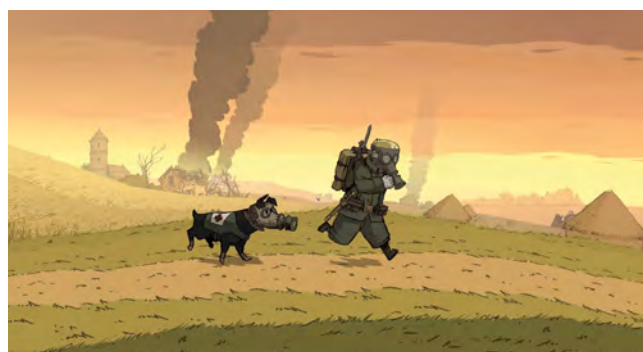
LEFT Escaping from this POW camp requires a few well-placed bribes, and sees you trudging through mud while soldiers get drunk in the background. You can change layers via paths between the buildings



BELOW Walt the dog has his own gas mask to negotiate bombarded areas. He spends time with every playable character and can be petted or called to heel at any time



ABOVE During driving sequences, you must avoid enemies approaching from behind as well as obstacles – such as pot holes – on the road ahead, signalled by an illustration that flashes up just before the hazard itself





while you'll spend more time under fire playing as Freddie, progress is still mostly about puzzle-solving.

And the same is true for Karl, a German-born farmhand who, after leaving his home country, ended up working for Emile and falling in love with his boss's daughter, Marie. The couple had a baby just after the assassination of Franz Ferdinand, and Karl is forced to leave France when the country ejects all German expatriates in response to rising tensions, rejoining the German army in the process.

Many of the game's puzzles revolve around a fifth character, the aforementioned Walt. Holding L1 on our DualShock brings up contextual commands, each assigned to a different button, which allow you to send the scrappy canine through small gaps to retrieve keys or other items, distract guards or just return to you. He'll bark at items of interest or to warn of potential dangers, and can crawl beneath rising gas to retrieve a gas mask, for instance, or even pull levers to move platforms or machinery. One particularly enjoyable section sees you switch between control of Emile and Freddie, each on different sides of a river, using Walt to ferry items between the two humans. He may not have a speaking part, but Walt proves as essential to your survival as you are for his.

Describing the other characters' roles as speaking parts may be a bit of a reach, however. Instead of dialogue, characters mumble just-perceptible bursts of words accompanied by pictorial speech bubbles. For example, early on in the game, a ladder is blocked by a soldier. Walk up to him and a speech bubble will appear that first displays a ladder with a cross through it, and then a heart and some quaver notes. Get a nearby brass band to play, and he'll wander away to join the other



NOVEL GRAPHICS

Valiant Hearts is built on UbiArt Framework, the same engine behind *Rayman Origins*, *Rayman Legends* and *Child Of Light*. As a result, the game looks beautiful, and it's especially refreshing to see the toolset turned to something grounded in reality as opposed to hazy fantasy or limbless psychedelia. The game uses a muted colour palette that moves from desolate greys and browns to bucolic greens and deep Parisian blues. The amount of background and foreground detail is a particular treat, too, and when combined with the ability to move in and out of the screen, it makes for a world that feels far from two-dimensional.

ABOVE Comic book-style cutaways are used to show relevant enemy activity happening offscreen. Here, Emile must wait until the guard steps away from his gun before making a dash for the next piece of cover

revellers. The system imbues the game with a kind of emotional shorthand that complements its upsetting subject matter and avoids the trap of heavy-handed exposition, leaving a narrator to fill in the blanks between levels. Emile also sends letters home – narrated, oddly, in an English accent, though the performance is a powerful one.

The story is filled out by short diary entries from each character (including the non-playable Marie) and a series of Facts, which open up as you progress. Thoroughly researched in collaboration with the French-government-funded commemorative body Mission Centenaire 14-18, this information is accompanied by photographs (sometimes heartwarming, sometimes harrowing) and, despite not being directly integrated with the game, never feels bolted on. There is also a hint pigeon should you get tangled up in one of the game's less logical puzzles, the avian messenger delivering gradually more detailed clues on a timer to encourage you to give it another go first.

Boss fights aside, Ubisoft's consideration for its subject matter throughout is striking, and for the most part *Valiant Hearts* feels like a fitting tribute to the millions who died fighting on both sides of the Great War. That the story never takes sides, nor cheapens its campaign by making the player solely responsible for victory (or, indeed, defeat), is even more remarkable. *Valiant Hearts* is simple, humble even, but it's never facile, and it's impossible not to be moved by the very personal stories it tells along the way.

Post Script

Yoan Fanise, content and audio director

Yoan Fanise began his time at Ubisoft as a sound designer on 2003's *Beyond Good & Evil*, graduating to audio director on *Rabbids Go Home* and *Assassin's Creed III*, which he worked on at Ubisoft Singapore. His latest project also has a historical grounding, and here he tells us what inspired *Valiant Hearts*' emotive audio design.

A lot of research has gone into *Valiant Hearts*. How does this manifest in the audio design?

We spent time reading many letters written during World War One, some from our families, and the emotion we got from that was a subtle. When you write a letter in a moment like that, you don't explain everything – you don't say, "OK, it's horrible. I'm going to die tomorrow." No, you try to be optimistic and say, "It's going to be all right. Please don't worry." It was very emotional to have this feeling of them not wanting to talk about the fact that they will probably die. It was really important for me to find tracks with the right mood, that reflect the subtlety of these emotions.

There's a playfulness to the game that reflects that stoic spirit, but was it hard to balance the lighthearted elements with the darker moments?

When we started to put together the music and the graphics, it was blending very well. It was a perfect match from the beginning: the contrast was clear between the piano, and this dark background with dead bodies, and it was really powerful. That's why we don't have much dialogue in the game.

The lack of in-game dialogue gives the game an intriguing atmosphere, certainly.

At the beginning we were a bit crazy, because we said, "Let's do a narrative game with a deep story but let's try to make it without any dialogue!" It was challenging, and in the end we still have some between the [gameplay] sequences, but it was good for us to try to stick with that and just have gibberish in the game. It created something interesting, because the gibberish we created is universal; it's a kind of French, a kind of German, a kind of English... It was funny to discover that it creates another emotion, just *seeing* someone talking about something. You pay more attention to the tone, the flow and the music. In fact, the music tells the story.

There are moments when there's no music at all, though. How did you decide where to pull back?

I think it was a rhythmic thing. When you look at the flow of the game, and you start to realise that on this part of the game we have too much music, there's a fatigue effect. So let's keep music only for when you



"There were joyful moments between battles. We wanted to represent those moments too, not just the sad ones"



need it to tell the player something. And sometimes it's better to have no music and then the sudden scream of the wounded on the battlefield. It creates a feeling.

The soundscapes in the game are extremely detailed and, like the narrative, rarely put the player centre stage. Was that a deliberate attempt to make the player feel a small part of the wider war effort?

You're right: the contrast between the huge machines that were created at the time and a little human in the middle of all of it. That really was the intention.

What were your influences for the compositions?

For me, the most important thing was to stay simple. I prefer a simple track with just one instrument: one piano, or one violin, and that's enough. For the driving sections, I was listening to lots of music – I discovered many music tracks that I didn't know from the time, but some of them were famous. For example, when you play the first taxi drive, it's [Brahms'] Hungarian Dance No 5. It's a melody many people know, but they don't necessarily know where it comes from. So it was important to me to bring those historical tracks that people were listening to at that time.

What was the idea behind putting rhythm-action sequences into the game?

To have brighter moments. But it was also supposed to reflect a historical fact – that, in fact, over the four years it wasn't battles all the time. There were battles, but most of the time they were waiting for something to happen, moving or travelling. There were a lot of joyful moments in between: soldiers playing cards and other games. We wanted to represent those moments too, not just the sad ones. We had a tagline: "In the middle of horror, there is always a glimmer of light." So we keep in mind all the time not to be just dark and sad.

There were concerns that the game could be crass or offensive. Were you ever worried about that?

When we were making [the animations for the Germans], we checked with Ubisoft Düsseldorf to make sure [they weren't] perceived as offensive. We did the same thing for all nations.

Why does Emile narrates his letters home with an English accent, even though he's French?

[Laughs.] We recorded both the English actor in his own accent and with a French accent. And then we tried a French actor in English, too. We tried every combination, and when we were listening to the results, the best take was still the English actor with an English accent, because the acting was better! ■

Divinity: Original Sin

Divinity: Original Sin is the direct descendant of the original CRPGs and the pen-and-paper games that inspired them. It's the product of nostalgia in a measurable sense, as evidenced by the thousands of Kickstarter backers who made it happen. As you might expect, it's a game that doubles down on the strengths of its genre — but that's not the key to its appeal. Divinity deserves notice because it celebrates ideas that fell out of favour as the RPG matured. This is a game about lateral thinking and providing the player with options. It's about consistently implemented game systems that encourage creative problem-solving over following waypoints, and memorable dialogue options that allow the game to function as an adventure game as well as a combat-led RPG.

Dialogue is, in fact, where Divinity's most prominent innovations are found. The game stars two protagonists rather than one, and in singleplayer you have equal control over both. You choose their appearance, names, gender and class as you would in any other RPG, but you're not required to create duplicates — or even friends. Every decision in the game is made collectively, and you're encouraged to roleplay these interactions and create disagreements from time to time. These interactions are used to establish the personality of each protagonist as well as their relationship with each other, and this has a knock-on effect in terms of stats and the progression of the plot. The system also has clear benefits in co-op, where it allows both players to participate equally as lead characters in the campaign.

Those first two heroes establish the basis of your party, and it's your party that defines the way you'll progress. This isn't just about combat — although that's part of it — but how you overcome all of the obstacles placed in front of you. Divinity: Original Sin has an old-school open-handedness when it comes to quest objectives, and if it seems like your characters' abilities should allow them to solve problems in unorthodox ways then the game will, more often than not, allow you to make good on that. A forbidding burning ruin patrolled by flaming skeletons can be made more hospitable by a mage specialising in water magic. An early murder investigation is made easier if you have a few criminal proclivities of your own, and at least one character who can crack locks and confirm a suspect's guilt or innocence with a bit of aggressive espionage.

You are provided with almost no direct guidance. What you're told at the beginning of a quest is all you get, and it's up to you to figure out the directions you're given. This can lead to frustration, particularly when instructions aren't quite clear enough. Early on you're directed to explore a beach to the north-west that is inaccessible if you head in that direction; instead, you need to reach a cave farther north. It's possible to intuit this if you pick up the right sidequests and pay

Publisher/developer Larian Studios
Format PC
Release Out now

What you're told at the beginning of a quest is all you get; it's up to you to figure out the directions you're given



attention to everything you're told, but miss one or two details and you're liable to lose a couple of hours battling in the wrong direction.

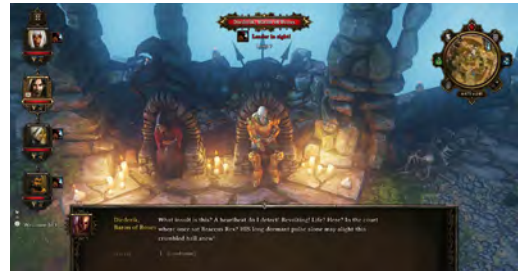
Much depends on how you respond to feeling a little lost, a little out of your depth. That sense of precipitous complexity is one of Divinity's chief draws, and it is of totemic significance to the genre advocates who supported the game's development via crowdfunding. Complexity is arguably inevitable when the player is afforded this much meaningful freedom, but there's nonetheless a sense of inelegance that comes when game systems pile on top of each other.

Another example: every character in your party has their own inventory and their own reserve of gold. You might loot a magical suit of armour and give it to your warrior, only to find that your warrior can't afford to have it identified by a merchant back in town. This means swapping the item to your rogue's inventory so that they can pay the fee, or transferring gold from your rogue to your warrior instead. Either way you're likely to spend twice as many clicks performing basic tasks as you need to. Extrapolate this thinking across the game as a whole and it's not surprising that you'll spend upwards of 20 hours running around the game's first town. But this school of design has practical and tonal benefits too, playing to Divinity's particular sense of realism and the notion that you're free to navigate the game in your own way.

This is a difficult game, with a turn-based combat system that punishes mistakes hard. Trial and error is the rule, and success often means unlearning something that you've been trained to do by other games. Conserving resources like spell scrolls and special arrows is an easy way to lose key battles. Standing around in a water is a good way to get electrocuted. Fighting in the open against a complement of archers is a terrible idea when you could be barricading yourself in a farmhouse. Adapt your thinking and this is an excellent strategy game in its own right, where each victory is built using tools that you create yourself. Divinity is very good at providing you with a sense of ownership over your approach to the game.

You'll likely feel a stronger attachment to your party than any of the characters you meet or the broader plot they play a part in, however. Divinity is a colourfully written and often funny game, but one that doesn't deviate much from the fantasy rulebook, an area where a more substantial break from the past would have been welcome. The draw of new challenges is enough to keep you moving, but it's ultimately a setting that you'll like rather than love. It's this that holds Divinity back from joining Baldur's Gate or Torment at the genre's peak, but the fact that it warrants that comparison at all is a testament to Larian's achievement.

RIGHT Setting up flanking manoeuvres without exposing yourself to the same is the best way to overcome difficult fights. You've got the freedom to draw battles in any direction you wish



ABOVE Hints about the main plot can be uncovered in sidequests and by exploring the world. *Divinity's* storytelling feels organic even if its subject matter is deeply familiar.

LEFT Light weapons such as daggers can be used more in a given turn, making them a good way to apply status effects. A dagger with a ten per cent chance of stunning can be very effective



BELOW Enemies have the same abilities as you. Forcing them to assist each other rather than fight is a good way to waste their turns



Gruikane the *Peasants* saved against:
Knockdown
Gruikane the *Peasants* was hit for 43
Crushing Damage
Madara used Helping Hand on *Garris*.
Garris is no longer Knocked Down.



Archers have a range of special arrows, making them more versatile than mages. Remove or disable enemy bowmen

Post Script

The return of the CRPG is part of a sea change in player expectations

Divinity: *Original Sin* is the first traditional RPG in what is likely to be a substantial revival for the genre. Next is *Wasteland 2*, with *Pillars Of Eternity* to follow after that and in Xile's *Planescape Torment* successor, *Torment: Tides Of Numenera*, in the months thereafter. Every one of these games, including *Divinity*, was crowdfunded for all or part of its development. The easy narrative here is that hardcore fans wanted these games back and Kickstarter gave them the means to pay for them: that crowdfunding is, in essence, a preorder service for games that'll fly with a small audience but not attract the kind of numbers that warrant publisher investment.

There's truth to that interpretation, but *Divinity: Original Sin*'s week-one sales suggest a different reality. It was the most popular game on Steam in the week immediately after the summer sale. It will have benefited from the absence of a triple-A competitor in the early summer drought, but this isn't the first time that a niche game has occupied that position for a substantial amount of time. *DayZ*. *The Forest*. *Spintires*. These games don't require Kickstarter campaigns to be viable: they evidently are already.

There are multiple reasons why this is the case. Digital distribution is a big one, as is

YouTube. Cult games from the 1990s — RPGs, simulators, adventure games — have been fast-tracked into the mainstream thanks to the ease with which formerly isolated fans can become advocates thanks to a diversifying game media. Only a small number of people may have been fans of *Planescape Torment* in 1999, but it's evident that a disproportionate number of them have subsequently become bloggers, YouTubers and writers.

The question this raises is why these games in particular persist in the cultural memory of PC players for so long. Traditional RPGs like *Divinity* offer an answer, grounded in the ways in which it differs from the types of RPG we're used to in 2014. It is committed to its own concept of realism, which is something that it has in common with both *DayZ* and *Euro Truck Simulator 2*. These are all games about having 'real' experiences within certain boundaries; games that promise to let you express your agency to a substantial degree within an environment that feels like it adheres to the rules of real life.

When this shift occurred originally it was because technology had advanced to the point where digital versions of pen-and-paper games were possible. Tabletop gaming laid out the principles of living another life within a simulated world that games would then adopt,

and those original RPGs treated non-combat and dialogue-based problem-solving as functionally equal to fighting. But games were always better at building digital systems around combat than they were at enabling the social and improvisational experiences that a live gamemaster can enable, and eventually combat became the principal focus of the genre. Roleplaying videogames went back to being videogames: skill-based challenges built around the principles originally established in the arcade.

The success of *Divinity: Original Sin* demonstrates that the popularity of this other way of thinking about games never really went away. Players are still captured by the idea that they, not a game designer, are capable of determining how they solve a problem, the manner in which they encounter a story, or the amount of freedom they have to fail.

These titles can teach modern games a lot about how treating the player like they're in control will pay dividends in terms of engagement. Feeling like an experience was entirely your own is a tremendous reason to advocate that experience — and now, when it is so easy to share that feeling, it's not surprising that these games are making tremendous headway into territory previously defined by big-budget mainstream titles. ■

SUBSCRIBE

GO TO UFC.COM/MAGAZINE
TO SUBSCRIBE NOW!



AVAILABLE IN PRINT
AND DIGITAL FORMATS

Shovel Knight

Shovel Knight is rubbish. Not the game, you understand, but its azure-armoured star. Which defender of the realm in his right mind would head into battle with nothing but a stubby little spade and only one way to swing it? He's nimble enough, and a capable jumper, but the only thing he has in his arsenal besides that single shovel swing is a pogo-like move borrowed from Scrooge McDuck, activated by pressing down on the D-pad or analogue stick in mid-air. Unlike *Duck Tales*' feathered moneymen, however, he can't cancel it by simply releasing the input, so he will keep on smashing breakable blocks beneath him until he falls to his doom, he strikes terra firma, or you cancel the animation with a regular shovel swipe.

He's not the sharpest tool in the shed, in other words, so perhaps it's little surprise that his partner, Shield Knight, fell in battle against The Enchantress, a sorceress whose Order Of No Quarter has overrun this 8bit-styled world. Luckily, he's not alone in his quest: the world contains a number of citizens with the means to help this diminutive loner and his laughable arsenal save the world. The Gastronomer cooks up platters to extend your health bar. The Magician will give you extra uses of Relics, a selection of special abilities sold by Chester the jester downstairs in the pub. The Armourer offers up stat-modifying suits, while the Shovel Smith adds new properties to your spade.

In the absence of a better melee weapon, it's the Relics that do the most to help Shovel Knight save the day. Some of Chester's wares give you extra combat options – the arcing Throwing Anchor, the bouncing Chaos Sphere, the smartbomb-like War Horn – but many expand your range of movement, too. The Mobile Gear deploys a platform with a spinning cog beneath it, which helps you cross large gaps; the Propeller Dagger is an air dash with a sword on the front. Some Relics are more useful than others, and we spent most of the game using the horizontal Flare Wand projectile. Effectively bringing a gun to a shovel fight proves an invaluable aid in a game where the odds are so stacked against you.

Pitched to Kickstarter as a love letter to the NES era, *Shovel Knight* is punishingly difficult, a game of quick reflexes and exacting precision that presents you with your death tally when the credits roll, and seemingly enjoys doing so. It's sadistic in other ways, too. Botch a jump and you'll fall through to the screen below, which you might have once considered easy; perhaps it contains a floor of spikes and two platforms, each of which moves across the screen when you hit a switch. It's only as you're sailing helplessly down to your final impalement that you realise you've been had.

Yet Yacht Club Games' reverence for 8bit convention goes far beyond mere difficulty level. This isn't just the work of a studio in thrall to the halcyon NES days, but

Publisher/developer
Yacht Club Games
Format 3DS, PC (tested), Wii U
Release Out now

A love letter to the NES era, *Shovel Knight* is punishingly difficult, a game of quick reflexes and exacting precision

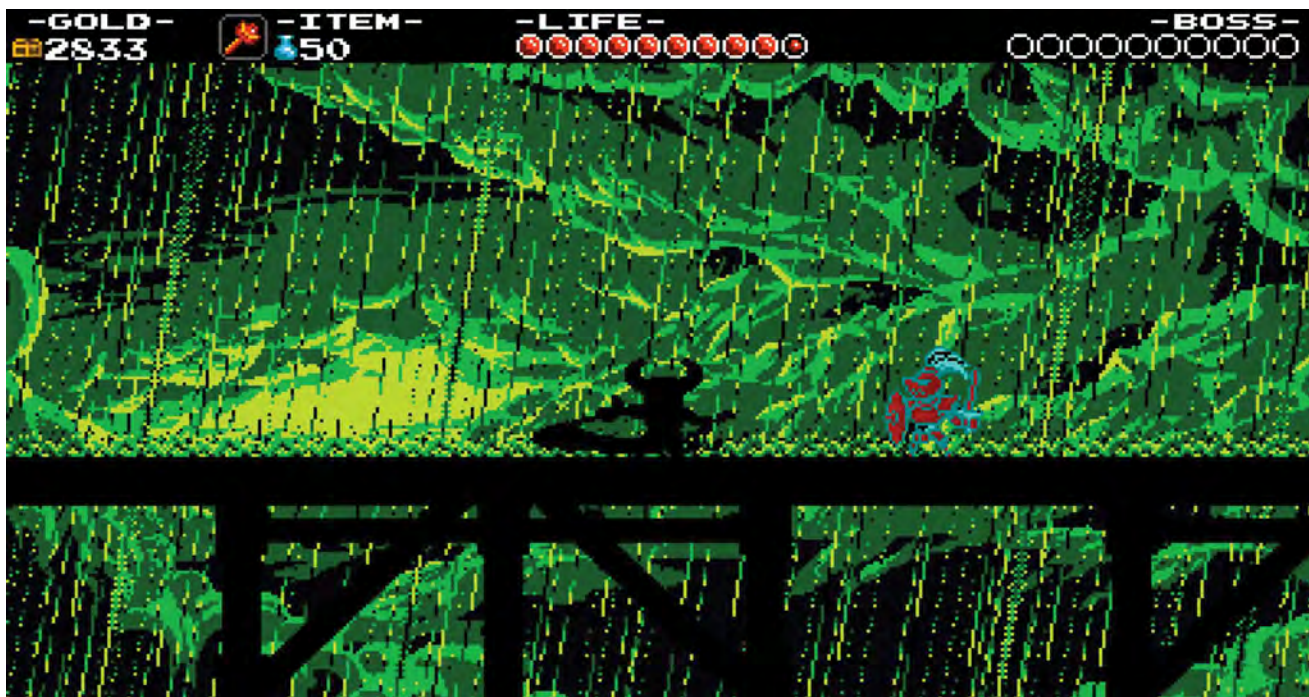


one that wishes they never went away, that developers had spent the past three decades eking out incremental performance improvements. *Shovel Knight* takes the rules of NES development and bends them so that it feels authentic without needlessly subjecting itself to the original hardware's limitations. It runs at the same vertical resolution as a NES game, but extends the horizontal pixel count to suit widescreen displays. Its soundtrack is made to the same rules as a handful of games released late in the system's lifespan, whose extra audio channels couldn't be heard on hardware outside Japan. It uses four or five colours per sprite rather than three. One of the few NES limitations simply ignored is sprite flicker – some things are best left in the past.

Much of *Shovel Knight*'s design is traditional, too, a procession of themed levels with themed bosses. There's an ice world, with a boss that wields a snow shovel; an airship level, whose final enemy flits around the screen thanks to the propeller on his back. Yet there are plenty of ideas borrowed from more modern times, too. Die and you'll leave a quarter of your accumulated currency where you fell, and only have one life to get it back. The appearance of an enemy sprite on the world map invites you back to a level you've completed for either a scrap or a platforming challenge. Yet even when it's playing to classical convention, *Shovel Knight* has some fine ideas of its own. You'll navigate much of the airship level on the wind, whose abruptly shifting currents will propel the leaden of reactions into walls of spikes. In the obligatory fire level, globs of bright green goo can be thwacked from platforms to the red-orange abyss below, turning lakes of lava into lurid trampolines.

Each of these little hooks is masterfully presented, too. Text is used only for exposition, and a game of so specific a design philosophy has no place for tutorials. You learn through play and play alone. The first level opens on a screen that is empty except for our hero and a pile of rocks, so we learn how to dig gold from the ground. It's a recurring theme: every new element and idea is introduced in a sparse screen, the difficulty then ramping up steadily, a checkpoint arriving just as you're on the brink of giving up. It's a sobering reminder of how reliant games have become on help text.

In this sense, *Shovel Knight* is as respectful of the player as it is the NES era. Sadly, that still hasn't driven Yacht Club to deliver on all of its Kickstarter promises at launch; the absence of its gender-swap mode, in particular, feels like an own goal at this point. We'd also have preferred the checkpoint-free late-game boss rush to have stayed in 1985. But taken as a whole, *Shovel Knight* is a marvellously executed concept piece that sets a new standard for vintage homage. The next time someone Kickstarts a spiritual successor to some beloved game of yore, it's going to need a lot more than merely pixel art and chiptunes.



ABOVE *Shovel Knight* treads the well-worn path of having you work under cover of dark, with the odd flash of lightning to show the way. It's no trouble here, but against a scythe-throwing, teleporting boss, it's another matter entirely.

LEFT The game's difficulty curve is finely tuned. As soon as you think you've got your head round Yacht Club's latest idea, you're reminded who's in charge. Here, propeller-wielding enemies attempt to push you off platforms to your doom

BELOW Levels end with Shovel Knight at a campfire, the camera panning up through a starry sky rendered with an appropriately '80s-feeling parallax effect



ABOVE This rainbow-spewing statue powers one of the toughest sections in the entire game. Hit it and it shoots across the screen, leaving behind a rapidly disappearing technicolour wake for you to use as a platform



Pullblox World

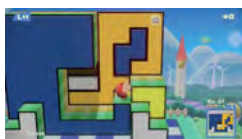
You'd think the children of Pullblox Park would have learned their lesson by now. Another 250 of the little blighters have navigated a complex tower of interlocking blocks and trapped themselves at the summit. And once again it's down to Mallo, our portly, scrotum-nosed cat-cum-sumo wrestler protagonist, to set them free. We're only too happy to oblige, but really, this town doesn't need a hero so much as a fastidious health and safety officer.

This, the third game in the *Pullblox* series but the first on Wii U, returns to the 3DS original's template: there's no room here for sequel *Fallblox*'s central conceit, which saw brickwork tumble downwards if there were no supporting blocks directly beneath it. It is, once again, a game of pushing, pulling and sliding coloured shapes to create a path to the imperilled infant at the top, a simple premise that is, after a gentle introduction, put almost instantly to brain-melting use.

The fact that no block can be pulled out more than three times is the key to how this conceptually simple game rapidly becomes a devious one. You frequently have to go back down before you can go up, moving around the blocks that got you to your current position and obscuring the path back down. You frequently box

The right trigger zooms out the camera – here, for instance, you'll need to do so to see where each manhole leads. Some puzzles are so large that even that won't be enough to bring them fully into view, however

Publisher Nintendo
Developer Intelligent Systems
Format Wii U
Release Out now



MALLO GROOVES

3DS's unique selling point was undermined by Nintendo's advice that the 3D effect be switched off when used by under-sevens, so no game has ever been playable solely in 3D. The *Pullblox* series, however, has always benefited from it, and its absence here is felt, particularly when making precise jumps. The GamePad's right stick can angle the camera, with a click to lock it in place, but it's an inelegant solution and no substitution for the portable game's 3D.

yourself in by making bad decisions in the rush to get that one mission-critical block pulled out to its full extension, making the rewind function not so much a safety net as a godsend, a tool every bit as vital as the jump button. Things are further complicated by manholes, which you can warp between so long as two of the same colour are exposed; and switches, which either fully extend or retract all blocks of a certain colour.

If you're struggling – OK, when you're struggling – with the puzzles on the critical path, a Training Area holds a selection of less exacting challenges. Mysterious Pullblox, meanwhile, play fast and loose with the rules by, for instance, having all blocks of a certain colour move in tandem. That the sparse mechanics can be used to such an extent without ever feeling like they're repeating themselves reinforces the sense that Intelligent Systems is an aptly named studio.

There's a whiff of trial and error at times, but no puzzle's Eureka moment comes by accident. It might take 15 minutes of back and forth, and the odd trek to the reset button when all seems lost, but at some point everything will click into place. If the measure of a great puzzle game is in how it makes you feel like an idiot right up until the moment you feel like a king, then *Pullblox World* is quite the success. The 3DS games' stereoscopic effect may be absent on Wii U, but Pullblox has lost none of its depth.

8



Road Not Taken

A mother weeps, a blizzard howls. A wolf paces across the path deeper into the forest. You're exhausted, and there are still more children waiting to be saved. You know where they are, but you'll die before getting to them. You give up. "Every year we lose a few," says the town mayor, whose heirs you have sworn to find. "We'll make more."

Road Not Taken is about as grim a puzzle game as you'll ever play. Every move of its *Sokoban*-like block pushing presses you closer to exhaustion. And you can never undo. Every choice is permanent. Your journey is filled with regret as you fudge the forest's interconnected rooms of randomly generated puzzles. And your powers seem so slight: you can lift adjacent objects with a tap of X, then throw them away with another tap, or you can walk with them by expending energy. Use all your energy, and you restart from scratch.

Your first task is often to clear a way through a thicket of the game's 200 different objects — sleeping raccoons, flame sprites, trees, bears. You'll also find yourself having to open the doors between the forest's rooms, which are marked with various objects you must place next to each other: three conifers, seven rocks, eight open flowers. Sometimes the room won't have

If you collect them, you can stop certain objects from appearing in the forest — a useful way of avoiding irritants, such as the hawks that swoop down, take your energy and dump you in a random location

Publisher Spry Fox
Developer In-house
Format PC (version tested), PS4
Release August 5



TOWN CRIERS

Between years you can speak to the town's inhabitants, and to some residents of the forest itself. Save more children and you'll win resources like copper, rabbits and berries, each of which you can gift to befriend them. Their friendships will earn you invaluable energy boosts, new logbook entries and items, and you may even fall in love. But, *Harvest Moon* style, each character likes different items so you need to watch what you give them to avoid waste.

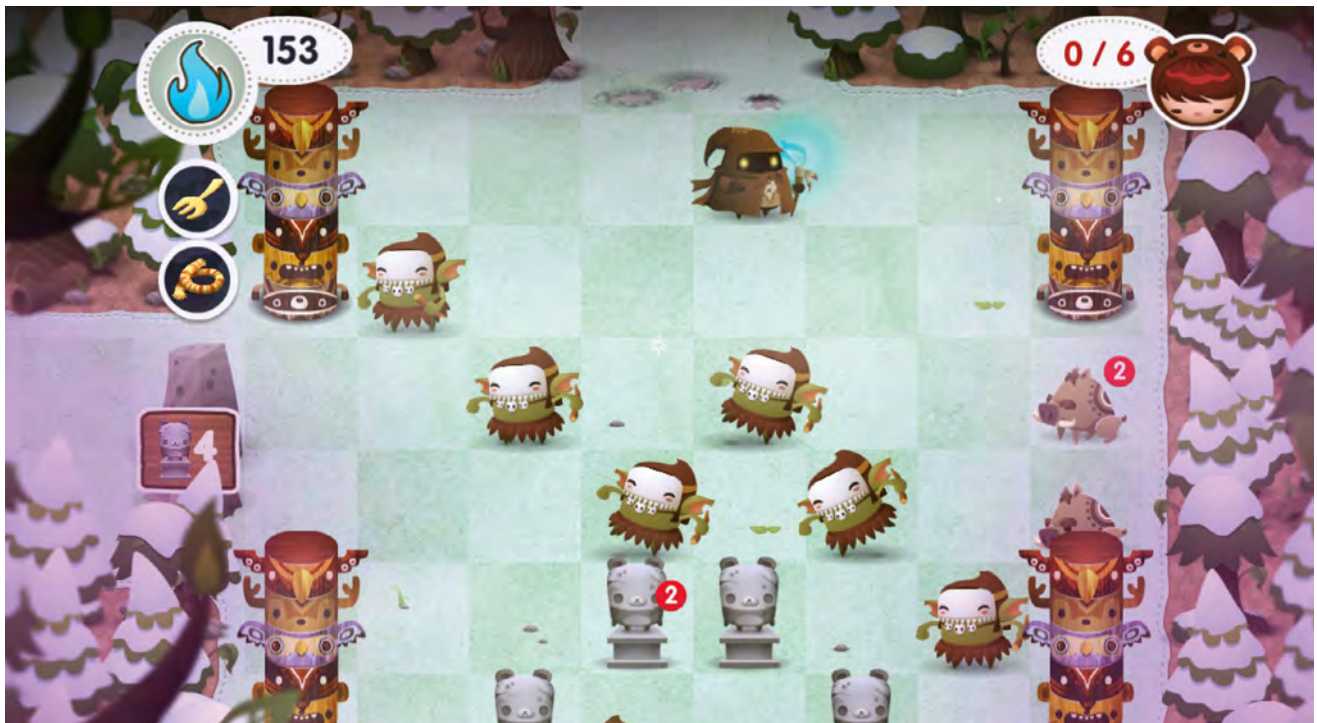
enough of them, so you'll need to throw them in from other rooms, illustrating the forest's persistence.

Combinations of objects will often meld them into new ones, a little like they do in *Triple Town*, Spry Fox's previous puzzle hit. Three flame sprites will combine into an axe, which combines with a tree to form a log. Two logs form a campfire, which will stop you using energy when carrying objects. Not that you know any of this when you start. Experimentation is key, each new combination or object filling an entry in your logbook. This Rogue-like element of *Road Not Taken* provides its backbone, your experience fuelling more successful runs in the future, and your logbook retaining all its entries.

Road Not Taken is an immensely clever game, rich in detail and complexity. But stumbling through its forests so often feels like failure, your energy levels dropping steadily as you scrape through the limit of finding half the children before you give up for the year and begin a new forest the next. Nothing is ever arbitrary, but the random layouts rarely provide elegant, authored solutions, and there are so many variables in play that mastery always feels far from your grasp.

For all its delightful art and writing, the cold logic in its Gordian design is unrelenting. Some will relish the challenge and invest the necessary time and thought to understand all its intricacies. For others, though, the forest's winter will leave them snowblind.

7



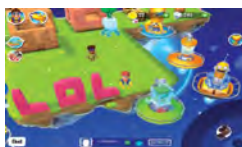
Supernauts

The polar ice caps have melted, but Grand Cru's vision of the future is a bright, happy kind of dystopia. Here, cartoon humans are rescued from the flood by superheroes and transported by rocket into space to find new homes on a floating asteroid, which you're in charge of expanding. You'll use machines to craft raw materials and bots to transform them into the building blocks for structures and decorations. You're in charge of the rescue operation as well, a caped crusader with a multipurpose zapper doing the job of the supposed saviours. *Supernauts* gives you plenty to do, which might well be its undoing.

The early stages certainly keep you busy, with objectives completed in seconds rather than minutes, and there's a tangible sense of progress. As your asteroid evolves into a mass of moving parts and pulsing icons, however, the clean, colourful aesthetic becomes cluttered. Soon irksome wait timers for every process ration out your interactions. You can speed things along with gems, of course, but demand quickly outstrips supply and all but the most patient will be dipping into their virtual wallets before long.

Still, once you do have enough materials, you can begin to personalise your home. Most new pieces of

Publisher/developer Grand Cru
Format iOS
Release Out now



SOCIAL SPACE

Other players can visit your world – and you, theirs – and you're encouraged to leave messages to tell them how you rate their handiwork, and to sell ice cream to their citizens for a handful of coins. Once your asteroid has reached level five, you can take part in global building contests too. You're invited to form or join a crew of builders, shipping supplies to an island on Earth and joining forces to construct an entry in line with the current theme.

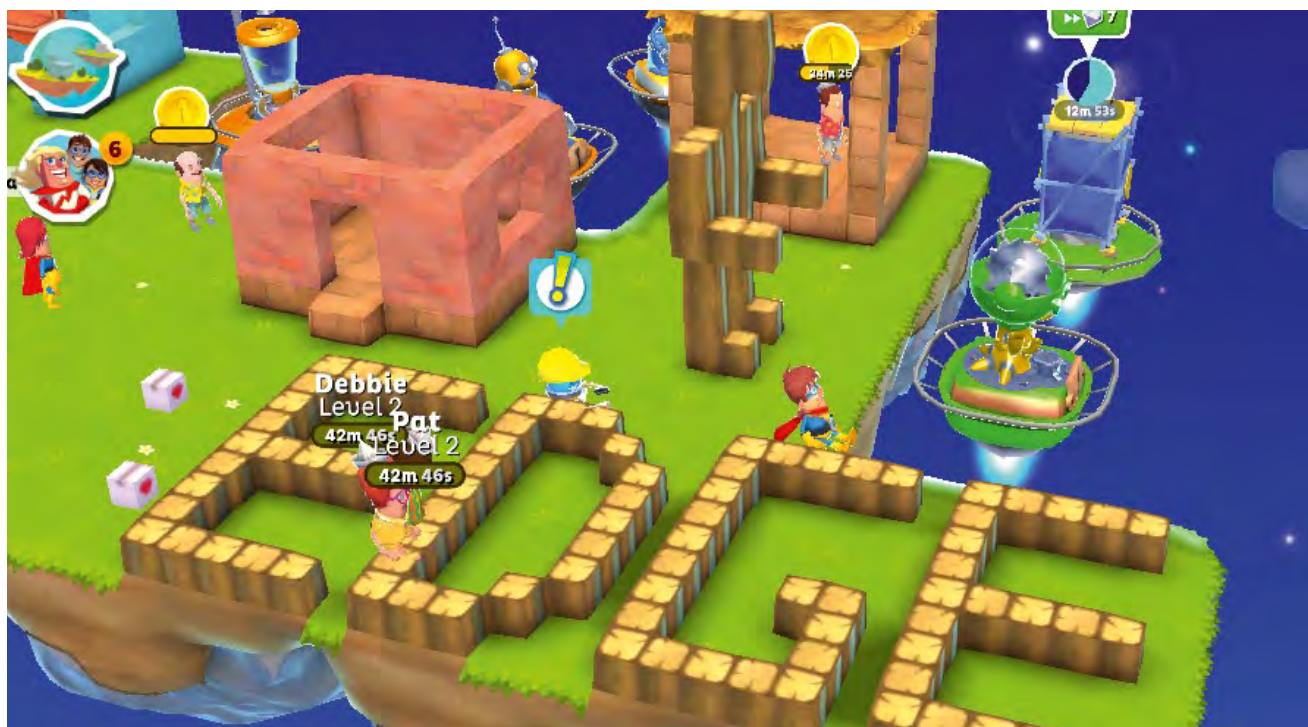
land come with 3D templates – cottages and castles, statues and flags – and while you're only rewarded for completing the blueprint, you're free to embellish it at any time. Alternatively, you can buy an empty square and construct something of your own design.

You'll soon run out of space unless you complete the objectives given by your robot assistant, which allow you to expand your boundaries and obtain new resources. By far the quickest way to achieve this is to dabble in the block market, completing time-limited requests for supplies to earn coins. This in turn leaves you short of materials with which to build, essentially forcing you to choose between creativity and progress.

Take a break on Earth, however, and you'll be itching to return to the stars once more. Each rescue attempt entails locating a zapper to destroy obstacles block by block before using the material you've accumulated to build a bridge or stairway so the rescuee can make their way to the rocket. Bonus missions wrongly assume that you find this process entertaining enough to repeat it several times over the course of a single area.

Supernauts is both too limited to succeed as a town-builder and frustratingly restrictive as a creative tool, while its superhero interludes are disempowering and dull. Grand Cru boasts that it has made the most ambitious iOS game of all time; that may be true, but it doesn't make the result any less muddled.

4



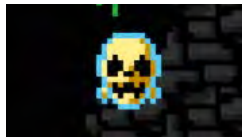
1001 Spikes

Retrieve the key, reach the exit. A simple enough task on paper, but just as your objective never changes throughout *1001 Spikes*, developer Nicalis is unwavering in its dedication to making it as difficult as possible. The single-mindedness of this sadistic platformer is one of its greatest strengths: its trap-ridden stages are designed to punish the hasty and the overcautious alike, and its abrasive nature even extends to the narrative. It's slight but expertly judged, an economical setup establishing not just its protagonist's motivation but your own. Aban Hawkins' father is an explorer who finds himself trapped in the temple of Ukampa – but not before ridiculing his son's failures and cruelly writing him out of his will. This is, then, more than just a rescue mission: it's about Hawkins' determination to prove himself to his father, reflected in the player's desire to conquer the temple.

Good luck. You have 1,001 lives, although that tally looks distinctly ungenerous around the business end of World 4, by which time you'll have been perforated by spikes on dozens of occasions, struck by poison darts many times more, stung by scorpions, squashed by boulders and burned by lava. It's hard, then – gleefully so – and often unfair. You'll pause briefly between

In theory, new costumes and characters should encourage replay value, but you'll have to start from World 1-1 whenever you switch, and you'll only earn coins with the first character you use to beat a stage

Publisher/developer Nicalis
Format 3DS (version tested),
PC, PS4, Vita, Wii U, Xbox One
Release Out now



SKULLS FOR SKILLS

Every stage hides a gold skull, either behind a breakable block or beyond a particularly exacting platforming challenge. As your collection builds you'll unlock new outfits for Hawkins, an in-game shop that offers packs of extra lives and other bonuses, plus several additional characters, among them *Cave Story*'s Curly Brace and *Knytt Stories*' Juni. Soon enough you'll open up two further arcade modes, both of which give you fewer lives with which to best longer stages.

falling statues, only to trigger a spike trap on the one seemingly safe tile in the middle. You'll reach the platform on which the exit lies, the next step prompting an arrow from an unseen gargoyle to thwart you mere feet from the finish. You soon learn to expect the worst, however, and you'll start to spot subtle clues that let you know when you're in danger. There's a blackly comic tinge to each new death: you'll ponder the wisdom of having two different jump heights early on, until a high leap sees Hawkins' athletic bravado instantly punctured.

It commits to its brutal conceit almost entirely. The three-note sting accompanying each death is followed by an autosave notification, an oddly humiliating way to accentuate failure. There's no prompt to retry; you're thrown straight back into the fray, helpless to resist another run. You can give up at any time, but you have to actively choose to do it. Rarely has quitting felt so much like cowardice. Only the presence of a level skip undercuts the challenge. The final stages may be locked out to those who fail to survive the rest, but otherwise beating or bypassing a level earns you the same reward.

And while the level design is meticulous, as the challenge steepens, so the process of rote memorisation grows steadily more monotonous, the satisfaction of mastering a stage long since surpassed by a wave of relief that it's over. The craftsmanship is easy to admire, but *1001 Spikes* can be a hard game to love.

6





+ + + + + + +

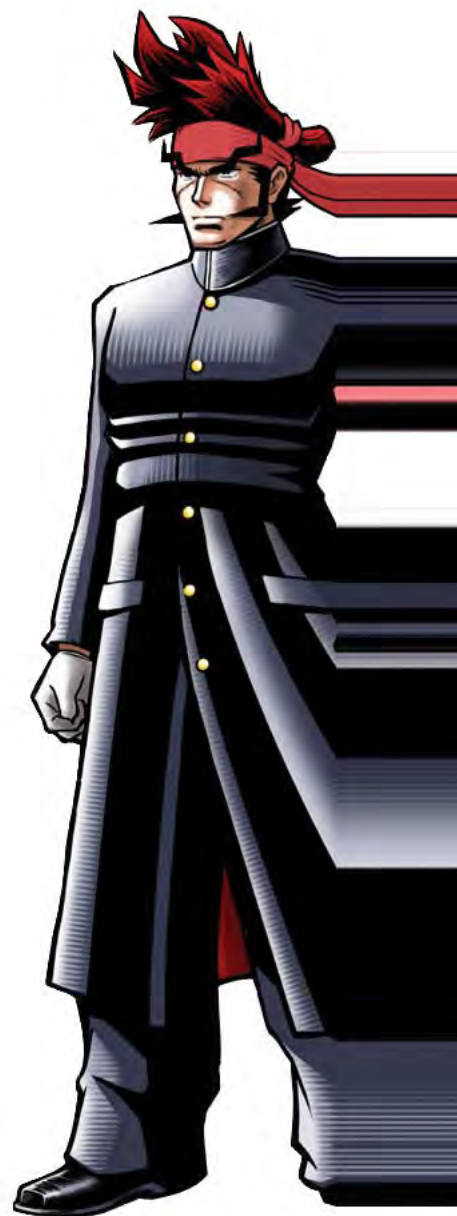
+ + + + + + +

+ + + + + + +

Osu!

Tatakae!

Ouendan



Revisiting the inspirational
yet punishingly hard
rhythm-action classic

By **NATHAN BROWN**

+ + + +
+ + + +
+ + + +
+ + + +
+ + + +
+ + + +
+ + + +

Publisher Nintendo Developer Inis Format DS Release 2005

The thought of it being made now is ludicrous. A punishingly hard rhythm-action game featuring a three-man-strong cheerleading squad dancing to a selection of J-pop tunes in order to motivate everyday people to overcome their problems would barely reach the modern-day drawing board, never mind the pitching stage or a green light. And if the impossible did happen, that game's chances of reaching the west would be slim in an era when publishers only localise the most globally friendly fare.

But in 2005, things were different, and none of that mattered. The Japanese game industry was in rude health, as was the British pound. DS software was region-free, and the Internet teemed with Asian exporters offering up Japanese curios for lower prices than the kid-friendly licensed tat that littered the shelves of western retailers. Passionate forum communities spread the word more effectively than any marketing campaign, and new cult classics were born on an almost monthly basis. This was the last great hurrah of the grey import, and *Osu! Tatakae! Ouendan* both prompted and delivered the loudest cheer of them all.

Western games tend to cast us as underdogs against seemingly impossible odds; in these titles, we save a world, a species, a way of life. Japanese games, however, often have a tighter focus. Link fights Ganon to save Zelda. Mario chases after Bowser to rescue Princess Peach. In the *Yakuza* series, the hoodlums that Kazuma Kiryu duffs up don't simply lie prone on the ground when beaten, but get up and apologise. They're chastened, promising to change their ways, to get back on the straight and narrow. In games like these, you make the world a better place in tiny, granular increments.

So it is here. The game's opening level has the titular Ouendan fist pump and pose their way through Asian Kung-Fu Generation's *Loop & Loop* to help a student study for his exams. At first, he struggles to concentrate, toiling away in a corner of the living room amid the din of the TV set and his obviously raucous family at the dinner table. A couple of pop-punk choruses later,

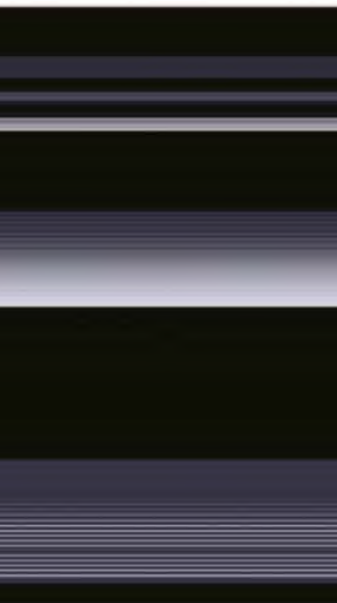
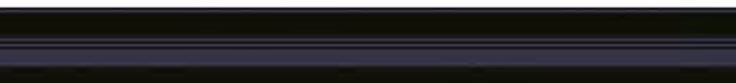
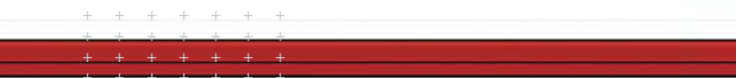
his now-understanding mother brings him a hearty dinner. Soon after, he's scribbling furiously on the page while lifting a dumbbell with his free hand, then doing push-ups while his little brother dances on his back.

He aces the test, of course, but this is a tale with more to tell than simply the importance of academic success. It's about dysfunctional families, about empathy, about the importance of a healthy body to a healthy mind. You may not have single-handedly fended off the alien invasion, but you've done something important, sweet and, above all, relatable.

So it continues. You help an office worker gain the romantic attentions of her boss — not by dressing or acting differently, but by working hard. You guide a nervous schoolkid through a game of dodgeball against a cocky, better-looking classmate who takes exception to the kid's advances towards the prettiest girl in class. You help a jaded old potter recover his inspiration by getting out into the world; ensure a budding politician sees off a flashy, better-funded rival; and save a struggling restaurant from closure. You solve a succession of everyday problems with little more than hard work, the Ouendan teaching not only those you save how to be a better person, but you too.

This, however, is a game made by Inis, the studio that, in *Gitaroo Man*, turned an average young man into a guitar-toting superhero then had him defeat a skeleton Mariachi band with his lightning-fast fretwork. *Ouendan* can be bonkers, too. When your squad's not helping out the man on the street, it's cheering a racehorse as it chases after a robber. The trio gives a Clark Kent-alike salaryman the strength to dragon punch a giant mouse that's stomping through Tokyo. They see off a stomach virus to ensure a concert violinist doesn't empty his bowels on a subway train floor. They even travel back in time to help Cleopatra get the Great Pyramid built and regain her normal, beautiful form — she's rather let herself go, you see.

Even when playing things relatively straight, Inis retains its playful spirit. When piano-tinged rap track *Kokoro Odoru* breaks down into bass-driven funk, our old potter dons an orange tracksuit and becomes a ▶



club DJ, inspiring him to turn out a creation in the shape of a 12-inch record.

Ouendan is not just a Japanese game thematically, it's one mechanically too. It's fast, precise and eventually punishingly difficult, and it does an awful lot with just three uses of the DS's touchscreen. Hit Markers are sequentially numbered coloured discs that you tap in time to the music. Each is surrounded by a shrinking circular line indicating when it's time to tap, and the closer the next marker falls to it, the sooner you'll have to hit it. Phrase Markers are two discs connected by a trail that must be precisely followed with the stylus; sometimes arrows at your destination will send you back along the path over and over.

Spin Markers, meanwhile, cover the entire lower screen with a wheel that must be spun via high-speed stylus circles — a



despite the droplets of sweat on his brow. On the top screen, meanwhile, things go south. The chef who was chopping carrots at lightning speed cuts his hand. The office worker pouring tea slumps against a wall, exhausted. A glance at the upper half of the DS reminds you that the consequences of failure here are hardly fatal; shift your gaze to the touchscreen and you realise that, consequences be damned, they matter.

Your quarry's motivation is signalled by the colour of their eyes. This all-white look is the first successful phase, but get them really fired up and bright flames will lick from their eye sockets

IT'S FAST, PRECISE AND PUNISHINGLY DIFFICULT, AND DOES A LOT WITH JUST THREE USES OF THE DS TOUCHSCREEN

little too fast, in fact, with furious touchscreen whirling guaranteed to draw puzzled looks from fellow commuters. Every successful tap, trace and spin is met with a sound effect — the kick or roll of a drum, a cymbal's crash, the whoops and cheers and whistles of the *Ouendan*. Unlike most rhythm-action games, you're not simply making the music, but adding to it; listen again to these songs without Inis's tapped-out enhancements and they're missing something. The *Ouendan* aren't just making the world a better place, they're also improving its music.

Along the top of the touchscreen sits a meter that depletes if you miss a beat. Miss too many and the camera zooms in on Ryuta Ippongi, the spiky-haired figurehead of the *Ouendan* and the closest the game has to a protagonist, his steely resolve unwavering

And things will become life or death soon enough. The final level, set to the 144BPM punk of L'Arc-en-Ciel's *Ready Steady Go*, sees a gigantic asteroid hurtling towards the Earth. The *Ouendan* have never been so desperately needed — the cry for the squad's help is made by thousands of voices instead of one. The stakes have been raised, and the difficulty level surges in kind: a couple of missed beats is all it takes for the touchscreen to focus tight on Ryuta, and only a rapid string of perfect hits gets you back on track. The game transforms from light, kind-hearted comic-book fare to a fight for the fate of the world itself. It is about as traditional as *Ouendan* gets, and surmounting it is the game's most rewarding moment.

It is not, however, the part that sticks most in the memory. That honour rests with a stage set to *Over The Distance*, a piano-led



During this opening level, it's easy enough to keep track of what's going on up on the top screen. Later, however, as the number of hit markers increases, it's all you can do to keep up with the touchscreen action

TURNING JAPANESE

Fully understanding *Ouendan's* stories requires a translation guide, but the game is hugely import-friendly. Comic-book panels tell you all about the task at hand, and tutorials rely more on visual instructions of the game's systems than textual ones. The one likely stumbling block is the difficulty select; the first option launches Easy mode, and *Ouendan* is a better game the harder it gets, with its greater number of hit markers a better fit for the soundtrack. The difficulty modes are as nontraditional as the game itself. Easy mode is called Light-Heartedly Cheer, Normal is Boldly Cheer, and Hard is Fervently Cheer. Completing the latter unlocks Gracefully Cheer – an odd name for a mode that has smaller markers and severely punishes mistakes, at least until you start it and see that your male squad has been swapped for a trio of pompom-waving cheerleaders.

A perfect hit nets you 300 points, less exact timing earns 100 or 50 points, while missing entirely means the Ouendan fall flat on their backs. A string of successful hits increases a multiplier that affects your final grade



ballad by Hitomi Yaida. The Ouendan dance but are mute, their cheers and whistles replaced by gentle bleeps, brushed drums and crisp cymbal hits as they watch a dead man descend from heaven to say a ghostly goodbye to his wife. Inis knows exactly what it's doing here – *Gitaroo Man* had a similarly sweet moment in which protagonist U-1 serenaded a love interest on an acoustic guitar by a campfire – but that merely warmed the heart. Here, Inis snaps it in two.

***Ouendan's* unlikely success** in the west did not go unnoticed, but rather than bring it west, Nintendo commissioned a spinoff. *Elite Beat Agents* replaced the Ouendan with a trio of ludicrously coiffed secret agents, and the Japanese soundtrack with a western one. It served only to prove that the original game's otherness was what

made it so special. Perhaps Ready Steady Go is the Japanese equivalent of YMCA; maybe The Blue Hearts' Linda Linda is regarded with the same disdain over there as Cher's Believe is here. In this case, ignorance was most certainly bliss. Nintendo set a forecast for 300,000 sales; *Elite Beat Agents* achieved less than half of that.

A mooted *Elite Beat Agents 2* never came to pass, but an *Ouendan* sequel did, its title translating as *Let's Go! Hot-Blooded Rhythm Spirit: Go! Fight! Cheer Squad 2*. Its release in May 2007 came months before the onset of the global financial crisis, and not even the Ouendan could stave off the damage done by subprime lending. Rhythm-action was changing, too, and it would eventually take Inis with it. The genre's increasing focus on peripherals saw the company commissioned to make Xbox 360 karaoke game *Lips*. It reviewed poorly and sold no better.

Ouendan is a snapshot of a much-missed moment in time, the last great drumroll and cymbal crash of the company that made it, the import market and the Japanese music game. It is a work of remarkable soul, one that reminds us that our fellow man's everyday struggles are as vital as the impending end of the world, and that nothing is insurmountable so long as you can summon the resolve to struggle on. Even now, nine years on and with the language barrier blocking our way, that message rings out as loud as the celebratory Ouendan chant at the end of a level: "Ouen! Dai-sei-kou!" Cheer! Big success! ■

Nothing says 'US secret agents' like enormous blond quiffs, coloured shades and red afros. *Elite Beat Agents'* far more obvious bid to be bonkers made it a much harder game to love



SIMPLY GO

OD.

goodgame-jobs.com



Image from Ryse: Son of Rome, achieved with CRYENGINE 3.0

THE POWER TO ACHIEVE YOUR VISION

CRYENGINE® – THE COMPLETE GAME DEVELOPMENT SOLUTION

EQUIP for the future of gaming with CRYENGINE® - the only multi-platform engine that delivers state-of-the-art lighting, physics, AI, animation and real-time design tools.

CREATE new gaming worlds using the production-proven, real-time CRYENGINE® Sandbox™ editor and accelerate your development with the many features invented and pioneered by the world-famous CRYENGINE® team.

ENABLE yourself with our **Engine-as-a-Service** program, giving you all-in access to the latest version of CRYENGINE for just 9.90 EUR/USD a month, and stay on top of the evolving industry with its advanced technology and features.

WORK with dedicated developers across the world; benefit from Crytek's unique experience in developing console and online games and build benchmark-setting games for all markets.

JOIN our community of major game studios and indie developers using CRYENGINE® to create some of the world's most popular online games and hits of the future.

ACHIEVE your vision with CRYENGINE®.

For more information, visit WWW.CRYENGINE.COM.



Games Education with a Reputation

19 years of educating video game professionals

- MSc Games Programming
- BSc Computer Science with Games Development
- MEng Computer Science with Games Development



"The University of Hull produces highly skilled graduates with a focus on core game engine technology combined with a strong emphasis on delivery. Alumni of the programme form a key part of Eutechnyx success."

— Andrew Perella, CTO, Eutechnyx

commercially relevant

leading edge

professional software development

The background of the entire advertisement is a detailed illustration of a medieval scene. In the foreground, a knight with a beard and long hair, wearing ornate plate armor with a red surcoat, holds a sword. Behind him is a large, imposing stone castle with multiple towers, battlements, and flags. The scene is set in a lush, green landscape with a small village visible in the distance.

OUR DOOR IS ALWAYS OPEN

Now is the right time for a new job!

To be able to build on our great success stories like Tribal Wars, Grepolis and Forge of Empires, and to always be state of the art, we are looking for new colleagues that bring a breeze of fresh air, new ideas, passion and know-how to the table. Particularly in the **development**, **graphics** and **online marketing** departments we are constantly searching for motivated, creative and talented people with a high demand towards their professional work and their work environment. Is that you!? Then hurry up, there is no time to lose! Apply now! career.innogames.com



Be Bright
Light up your career



Looking for a
new career in
videogames?
Start here:

jobs.edge-online.com

Design / Writing / Production
Localisation / Art / Programming
Interface design / Audio / Finance
Animation / Product management
QA / Usability / HR / Education
Marketing / Community management

EDGE

Edge's careers website features the best jobs in the videogame industry across the UK and around the world. Upload your CV today and let your future employers find you, or sign up to receive regular job alerts in your chosen field

GDC EUROPE RETURNS AUGUST 11-13, 2014

EDGE

READERS, USE CODE
GDCE14EM
TO SAVE AN ADDITIONAL
10% ON ALL ACCESS
PASSES!

REGISTER ONLINE BY AUGUST 6 AND SAVE!

GDC 'Eu

GAME DEVELOPERS CONFERENCE™ EUROPE

CONGRESS-CENTRUM OST KOELNMESSE · COLOGNE, GERMANY

AUGUST 11-13, 2014 · EXPO: AUGUST 11-12, 2014

GDCEUROPE.COM





JAMES LEACH

Postcards From The Clipping Plane

Conveniently ignoring the serious side of videogame development

Being charitable, I'd have to say everyone is allowed a blind spot – one thing they just don't understand. With me, it's chemistry. Not the sort that subconsciously lets you know when an attractive girl you've just met has immediately taken a deep dislike to you, but all the covalent catalyst bonding stuff. Yet this in no way lessens the glee I feel when others don't get the things that I do.

An entire wall of a studio was once covered with sumptuously drawn artwork of military aircraft. My job that morning was to move along looking at the images and cooing appreciatively as the artist explained them.

One combat aircraft looked particularly impressive. I asked, "Are those guns angled downwards for ground attack?"

"No," the artist replied. "It's so the plane doesn't shoot itself down." I laughed. He didn't.

"This is a supersonic fighter," he went on. "It goes faster than the bullets it fires, so the guns have to be angled away from it, otherwise it'd shoot itself down." At that moment, I'm fairly sure I invented the facepalm.

The same guy went on to describe the trails in the sky he'd drawn behind every aircraft as "jet lag". Later, he showed me a sleek, futuristic navy vessel with a unique property he'd come up with himself: "This ship has the ability to bob down briefly under the surface to avoid enemy fire. Neat idea, eh?"

"So it's a submarine."

"No. Submarines can't surface because of their weight. This is a ship that can go underwater and come up again." I left for an early lunch before he could show me the tanks.

It turns out that, although the line between genius and utter idiocy is a fine one, those camped on the moronic side have little chance of crossing over, though some come perilously close. I once had the pleasure of being present when a producer pitched the idea that nobody in our complex, story-driven RPG should show emotion. Their faces should be utterly still and not even their mouths or eyes should move. This, he said, would reflect the trauma of the postapocalyptic world they lived in.



The same guy went on to describe the trails in the sky he'd drawn behind every aircraft as "jet lag"

"It'll look like they're wearing masks," someone said.

"Exactly. What's more scary than that? Their faces show nothing, but we still know exactly what they're thinking and feeling."

"How?"

"Well, because we're in the world with them. And they'll still be talking. We'll make the dialogue really, really moving. We'll get proper voice actors and everything."

"But they'll look like robots," I said. "These are people fighting for their very survival..." I was stopped by the producer's raised hand. "It doesn't matter if people think they're robots;

the Terminator was a robot and everyone loved him. Also, we have to get this game finished in less than a month. Meeting over."

What always impresses me is how sure people are when they have no right to be. No, we don't just use ten per cent of our brains. No, the Romans didn't vomit between food courses. No, Bowser is not a dragon. He's a damn turtle. You should know that one, at least.

In the distant past, someone on a dev team I was working with brought up the subject of humour. We were making a cartoon-ish, comedic game, but he had concerns.

"The trouble is," he said, "that all humour is personal. I don't see how it can work."

"It works," I said, puffing on an imaginary pipe, "by personally making people laugh."

"Yes, but what I mean is, everyone's humour is personal to them. You don't know any of the people who'll buy the game, so I don't think we should have anything funny."

It was starting to dawn on me that here was somebody who didn't believe in the concept of people laughing at anything said by anyone they didn't know well. Upon questioning, I discovered that this guy claimed only to laugh at things his flatmate said and did. I almost gave up, but I persisted. Eventually, there was the vital breakthrough: he admitted he also found Red Dwarf funny.

"Aha! So do you know any of the people who make Red Dwarf?" It turns out he didn't. "So we can assume they don't know you. And yet they make you laugh?" Note how insufferable I get when I'm right.

"No," said my colleague. "I don't know them, but they make me laugh because their humour is personal to me. We're making a game for lots of people, and we don't know what they'll find funny, so I think we should leave the attempts at comedy well alone."

"One day, years from now, I'll write about this in a respected videogame magazine," I said. Then I killed him with an unplugged 486, which was cutting edge at the time.

James Leach is a BAFTA Award-winning freelance writer whose work features in games and on television and radio

#271

August 28



